

STATE OF LOUISIANA

DEPARTMENT OF NATURAL RESOURCES

OFFICE OF CONSERVATION

IN RE: Sterling Sugars, Inc.

Versus

Amerada Hess Corporation

Docket No. ENV-L-2015-02

Report of Hearing

Held At

Department of Natural Resources

617 North 3rd Street, Baton Rouge, LA 70802

November 12, 2015

VOLUME 1

PANELISTS FOR THE LOUISIANA OFFICE OF CONSERVATION

Stephen Pennington
Environmental Impact Manager, Environmental Division

Jamie C.T. Love
Geologist, Environmental Division

Brent Campbell
Director of Pipeline Division of Conservation, Oilfield
Site Restoration and Three District Offices
Engineering Regulatory Division

HEARING OFFICER:

Roedel Parsons Koch Frost Balhoff & McCollister
Tom Balhoff, Esquire
8440 Jefferson Highway, Suite 301
Baton Rouge, Louisiana 70809

* * *

APPEARANCES

COUNSEL FOR PLAINTIFF RACELAND RAW SUGAR, L.L.C.

JONES, SWANSON, HUDDALL & GARRISON

(BY: GLADSTONE N. JONES, III, ESQUIRE)

(BY: EMMA ELIZABETH DASCHBACH, ESQUIRE)

(BY: KEVIN E. HUDDALL, ESQUIRE)

(BY: JOHN ARNOLD, ESQUIRE)

601 POYDRAS STREET, SUITE 2655

NEW ORLEANS, LOUISIANA 70130

COUNSEL FOR DEFENDANT HESS CORPORATION:

LISKOW & LEWIS

(BY: MICHAEL P. CASH, ESQUIRE)

1001 FANNIN STREET, SUITE 1800

HOUSTON, TEXAS 77002

LISKOW & LEWIS

(BY: ELIZABETH S. WHEELER, ESQUIRE)

(BY: JAMES E. LAPEZE, ESQUIRE)

ONE SHELL SQUARE - SUITE 5000

NEW ORLEANS, LOUISIANA 70139

APPEARANCES (CONTINUED)

REPORTED BY: Estella O. Champion, CCR, CRR, RDR
(Certificate Number 76003 - In Good Standing)
Reporter, Baton Rouge Court Reporters

AND

DONNA CHANDLER, CCR, CRR
(Certificate Number 29002 - In Good Standing)
Reporter, Baton Rouge Court Reporters

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1 THE HEARING OFFICER: We're on the record.

2 This is a public hearing in the case of
3 State of Louisiana, Department of Natural
4 Resources, Office of Conservation, in the
5 matter of Sterling Sugars, Inc., vs. the
6 Amerada Hess Corporation, et al.

7 The case number in Lafourche Parish,
8 Number 10,091, 17th Judicial District Court,
9 Division D.

10 For the purposes of this public hearing
11 at the Office of Conservation, this is Docket
12 Number ENV-L-2015-02.

13 Hess initiated this public hearing
14 process by filing what is known as a limited
15 admission in the state court proceeding on
16 May 1, 2015 in accordance with the Louisiana
17 Revised Statute, Section 30:29(C)(1),
18 commonly referred to as Act 312, and by
19 admitting environmental damage exists on
20 Plaintiffs' property, Plaintiff being
21 Raceland Raw Sugar, LLC.

22 The limited admission process is a
23 procedure that is initiated pursuant to
24 Louisiana Code of Civil Procedure
25 Article 1563. Judge Christopher Boudreaux in

1 Lafourche Parish signed an order on May 15,
2 2015 referring this matter for public
3 hearing. He set the deadline to testify on
4 this plan for the evaluation or remediation
5 of the environmental damage to Plaintiffs'
6 property. The deadline was 60 days from the
7 date of the order, and Hess' plan was timely
8 filed on July 14, 2015.

9 Hess recently submitted an addendum to
10 the plan on October 23, 2015, which has been
11 accepted as timely. It was the subject of a
12 motion in limine which was denied. It's been
13 accepted as timely.

14 Raceland Raw Sugar, LLC, the landowner,
15 had 60 additional days, according to Judge
16 Boudreaux's order, to file its own plan or
17 comments or objections to the Hess plan.
18 Raceland timely submitted comments on
19 September 11, 2015.

20 This panel's charge is to listen to,
21 consider and review the evidence submitted
22 here in this hearing as to the Hess plan and
23 then, based on the evidence, to approve or
24 structure a plan that they determine to be
25 the most feasible plan to protect the health,

1 safety, and welfare of the people. The panel
2 will issue written reasons for the plan which
3 they approve or structure.

4 This hearing -- let me talk about a
5 couple of things the hearing does not
6 involve. The hearing does not involve
7 private rights, either by contract or in law.
8 In addition to the statute itself, I refer to
9 the Supreme Court case, State versus
10 Louisiana Land and Exploration Company, 110
11 So. 2d, 1038, 2013, where the Supreme Court
12 reviewed the Act and made that clear.

13 So in the preliminary rulings concerning
14 exhibits, we're not going to go into
15 contracts or what sort of, what sort of
16 rights the landowner has under contracts. As
17 the Supreme Court has said, all of those
18 rights can be pursued in court in a different
19 forum than this, and I believe they probably
20 are being pursued.

21 This hearing concerns, this hearing
22 concerns the issue of whether or not this
23 property -- it's to determine the most
24 feasible plan in accordance with applicable
25 state standards. And the Supreme Court case

1 that I just referred to I think, I think says
2 that applicable state standards are not
3 actually set forth, but the standards that
4 are typically looked to in this process are
5 probably, first and foremost, Statewide Order
6 29-B, which is Office of Conservation; RECAP,
7 which is LDEQ for spec standard; and where
8 necessary -- and I know it's in this case --
9 for radiation over NORM, LDEQ radiation
10 regulations under Chapter 14. Those are the
11 ones that most appear in these cases, so
12 that's applicable state standards that we
13 look to.

14 A couple of -- let me make a couple of
15 comments. I'm going to digress for a second
16 about the panel up here -- I'm going to
17 explain the panel and my role.

18 The panel: Mr. Stephen Pennington is on
19 the far right, my far right; Ms. Jamie Love
20 is in the middle; and Mr. Brent Campbell is
21 to my immediate right. I have provided to
22 all of you -- because I think it's helpful
23 that you know who you're speaking to and who
24 your jury is, if you will, for this -- I have
25 provided you their technical background and

1 what their work experience is. And all of
2 them have served on panels in the past and
3 that's set forth.

4 As far as -- these are the decision
5 makers. As far as I am concerned, and some
6 of you know this -- I've done this in the
7 past -- I am not a decision maker. I don't
8 consult with these panelists at breaks about
9 what I think about witnesses. And after this
10 is all over with, they are going to arrive at
11 a decision without speaking to me about what
12 I think about these witnesses. In other
13 words, my role is for the purpose of
14 assisting this process, assisting them in
15 particular, so that if there are any sort of
16 disagreements about the evidence as it comes
17 in, I will make those rulings.

18 I will try to keep order, I'll try to
19 keep the schedule going, so that they can
20 focus on what they are here about, which is
21 listening to the evidence. That's their job.

22 This is important, this is an important
23 process, I appreciate, for both sides. I
24 know it's not the last step along the way. I
25 realize that they are not the final decision

1 maker here. In other words, the state court,
2 there may be something called a preponderance
3 hearing. So this will not be a final
4 judgment for this; but they are going to do
5 this to the best of their ability, they are
6 going to be diligent, they are going to
7 review the evidence with diligence. And to
8 the extent that I can help through the
9 process over the next few days, I want to do
10 that.

11 If I, if I make a ruling on the evidence
12 or if I make rulings on relevant evidence, my
13 touchstone has always been and will be what's
14 fair for both sides. In other words, I
15 believe that we're best served by fairness.
16 I know there have been some issues about
17 deadlines. I'm a big believer in both sides
18 ought to have some certainty with respect to
19 those sorts of issues. So that's my rule.

20 Let me talk a little bit about the
21 limited admission. And the panel is well
22 aware of this. The limited admission
23 process, as we all know, is something that
24 has only been in effect for a couple of
25 years. The responsible party is entitled to

1 make a limited admission. That was the
2 subject of an earlier ruling. I think they
3 are -- the responsible party essentially has
4 the right under that statute or under that
5 Code of Civil Procedure article to make a
6 limited admission. They don't have to admit
7 responsibility even if, even if there should
8 be no disagreement about some other issue.
9 If they want to reserve that for some later
10 time, they're entitled to do that.

11 So this panel is not expressing an
12 opinion on issues such as groundwater. It's
13 simply that the limited question, the way it
14 is framed by Hess, is that it deals with
15 soils, including soils in submerged wetlands.
16 I don't know if I've got the language
17 correct. But it doesn't include groundwater,
18 surface water, or canal sediments.

19 It is Hess' prerogative to make that
20 limited admission, so the panel does not
21 express any opinion with respect to
22 responsibility. They are not going to
23 express an opinion with respect to those
24 issues. They are going to focus on what the
25 limited admission that was made.

1 And I said something in something that I
2 put out a couple of days ago that I couldn't
3 find 220 acres somewhere. I found it in the
4 first paragraph of the limited admission. I
5 had focused on paragraphs 4 and 5. But I
6 will say this: I didn't see it in the
7 reports or in the plan.

8 I'm not exactly sure what the 220 acres
9 refers to or what the boundaries of that is,
10 but I do understand the limited admission
11 refers to 220 acres. So with respect to, as
12 evidence comes in, you know, I assume there's
13 going to be an explanation about the soil
14 that we're talking about.

15 There has been -- I think I've addressed
16 this in my note. This is Raceland's brief.
17 They indicate its private contract claims are
18 essentially reserved. I agree with that, the
19 private contract and private law claims are
20 not in this hearing.

21 In the prehearing brief of Hess, there
22 is -- and I know it's an issue in this
23 case -- there's this statement. I'll read
24 this. At page 8 it says, "Statewide Order
25 29-B is applied to the property as it exists.

1 The pertinent statutory authority and
2 regulations do not authorize LDNR to evaluate
3 and characterize the proposed restoration
4 site based on what it allegedly used to be.

5 These are, these are my comments about
6 that. I'm not a decision maker again. I
7 realize that's the issue. That is an
8 important issue. There is an issue about
9 salt contamination. The panel is interested
10 in the evidence. I think, I think in general
11 the statement I read from that brief is
12 generally probably a correct statement, but
13 I'm not the decision maker and it's for them.
14 They are going to hear the evidence.

15 On the issue of historical hydrology,
16 there was an objection to evidence on
17 historical hydrology, because I know that
18 Raceland's position is that there has been
19 subsidence of the property. It was
20 originally an upland wetland. That's --
21 whether or not that's even relevant, I know
22 that's hotly contested, and it may not be
23 relevant. I'm not going to decide that. But
24 there has been in the plan Dr. Koob's report,
25 which I did read, and it was tedious, is --

1 speaks to the issue of historical hydrology.
2 And I know the purpose of speaking to it was
3 to set the stage for how it exists today.

4 When we get to Raceland, they may have
5 witnesses on what they, what their
6 contentions are. In general, I'm going to --
7 you know, relevance is important to me. I
8 want to cut off irrelevant testimony. But
9 because of that issue, this panel may agree
10 with Hess; but I think, since that's the
11 issue, an issue, an important issue, that if
12 there is testimony presented by Raceland
13 regarding -- I know they have got a couple of
14 witnesses -- I'm probably going to be more
15 lenient than I would otherwise be. And I
16 think this panel is entitled to hear the
17 argument on the salt issue between the
18 parties.

19 And I'm assuming that's not going to
20 drag this hearing out to great lengths. I've
21 looked at what people project.

22 Anyway, those are generally my thoughts.
23 And I haven't discussed this with the panel,
24 so -- they are the scientists; I'm not -- I
25 haven't discussed those comments with them.

1 Okay.

2 This is how I want to run this hearing.
3 The first thing I tend to forget to say is I
4 do wear hearing aids. I'm 40 percent deaf in
5 both ears. These are expensive hearing aids
6 I'm wearing, more than I wanted to pay, and
7 they help me. I can turn them up several
8 notches.

9 One of the problems I have when I have
10 them in is people tell me I speak too
11 quietly. And judges have told me that. So
12 if for some reason I drift, when I drift,
13 it's not my intention to drift. I think I
14 will pick up everything you say. But if I
15 ask you to repeat something, it's because I'm
16 trying to listen. I think I can hear well.

17 Okay. Logistically: We will start at
18 8:30 sharp each morning, unless the
19 panelists -- one of the panelists have a
20 problem. But we will start at 8:30 sharp,
21 and we will break at noon or as close as
22 possible to noon as we can, depending on the
23 witness. I'll break in the middle of a
24 witness. We will go for one hour for lunch,
25 noon to one. And then we'll take a 15-minute

1 break in the morning and a 15-minute break in
2 the afternoon. We will finish at 4:30 sharp
3 every day.

4 The 15-minute break in the morning, I'm
5 going to try to -- we'll go an hour and a
6 half or so on a typical day and we'll break
7 at, say, between 10 and 10:15, and then we'll
8 go to noon. And then, in the afternoon,
9 since we'll start at one, we'll try to break
10 at about 2:45 for 15 minutes.

11 Obviously, you know, if there's some
12 particular reason to break, we will; but I'm
13 a believer in let's just keep moving.

14 Okay. So, having said all of that, I
15 ask the two sides -- I don't have a docket
16 clerk. I ask the two sides to keep a running
17 list of the exhibits. I'm going to try to
18 make my notes. But as they are admitted,
19 keep a running list and to share them with
20 each other each day so there's no
21 disagreement, so that by the time we get to a
22 given day or get to the end, we're not having
23 a dispute about what actually came in. And I
24 would appreciate the help.

25 Okay. We set forth the schedule. So

1 what we're going to do this morning -- are
2 there any preliminary matters before we start
3 opening and take the first witness?

4 I know there was a motion filed
5 yesterday about a document, a document -- I
6 read the brief on my phone and I read the --
7 rather, I looked at the document on my phone.
8 I know it's a 1989 document dealing with the
9 Army Corps of Engineers addressing certain
10 property about submerged wetland. Other than
11 that, I don't know why -- but I saw it's an
12 appellate court document -- I don't know why
13 it wasn't listed sooner. Maybe somebody can
14 educate me on this.

15 MR. JONES: Mr. Balhoff, we have on behalf of
16 Raceland filed that motion yesterday
17 afternoon. The first time we saw that
18 document was day before yesterday when we
19 received the exhibit notebook. There are
20 other letters referenced in it. There's no
21 witness to testify about that. That has not
22 been a part of the process in the case. That
23 document has never surfaced in the case
24 before.

25 So really the first that we saw it was

1 in the exhibit, in the exhibit notebook for
2 purposes of these proceedings. It was just
3 untimely, and we don't think it's fair to
4 allow that document to come in.

5 THE HEARING OFFICER: Mr. Cash.

6 MR. CASH: Mr. Balhoff, if you look at the
7 bottom of the document --

8 THE HEARING OFFICER: Yeah, I don't have it,
9 but go ahead. I know it's Stanford, Hilcorp
10 Stanford.

11 MR. CASH: Exactly. It was produced in
12 discovery. So it may have been the first
13 time that the document was called to their
14 attention, but it's certainly not the first
15 time it was in their possession or available.
16 So this isn't a new document. It's not a
17 document that hasn't been marked in the
18 discovery process. It's a document that
19 they've had for some time as part of the
20 Hilcorp production, so ...

21 THE HEARING OFFICER: Well, there were --
22 Hilcorp exhibits were listed by Hess. In
23 other words, in -- I forget the witness's
24 name who testified for Hilcorp, and there
25 were exhibits attached to their deposition,

1 of which 2 through 7 have been identified as
2 exhibits in this case. They are Hilcorp
3 documents.

4 So my question -- you know, I don't mean
5 to be -- I've said this off the record and
6 I'll say it on the record: I'm like
7 everybody else, I practice law for a living;
8 and deadlines were intended for a reason, to
9 give certainty to both sides so everybody is
10 not getting at the last minute scurrying
11 around.

12 I'm not suggesting you're trying to
13 ambush anybody or anything like that, but the
14 point is that's what deadlines are all about.

15 And is there some reason it wasn't
16 identified as an exhibit?

17 And, by the way, with respect to their
18 exhibit list, I generally don't like
19 catch-alls, and I said that I wasn't going to
20 let them do that. I've had judges do that to
21 me. I think that's a good rule. But you
22 just can't say that and then just all of a
23 sudden go and bring exhibits up that they
24 weren't expecting. It's not meant to
25 penalize; it's an attempt to be fair to both

1 sides.

2 So is there some reason why it wasn't
3 actually identified?

4 MR. CASH: I think it was just something
5 that -- I don't think it's a majorly
6 important document. It's a comment in the
7 Army Corps of Engineers.

8 THE HEARING OFFICER: I saw the comment.

9 MR. CASH: Yeah. And so at the end of the
10 day --

11 THE HEARING OFFICER: And there's a comment
12 in the LDNR document that they're going to
13 use in 1989 that says it's an elevated
14 upland. But I presume that's one person
15 filling out a document.

16 Presumably -- I presume that there's
17 going to be evidence that's going to address
18 this thing, there's going to be data that's
19 going to address this whole issue that we're
20 talking about. So, you know, I'm going to --
21 in the interest of fairness to both sides,
22 I've already, with respect to them when they
23 tried to name witnesses, I said, no, you
24 didn't put them on your list.

25 So I'm going to exclude it. And if for

1 some reason, unless it's something crucial or
2 critical or something, I'm going to exclude
3 the document.

4 MR. CASH: I would simply ask that we would
5 reserve the right to use the document as
6 rebuttal or impeachment, should it become
7 necessary.

8 THE HEARING OFFICER: That's fine. And I
9 think I've said that for all the exhibits,
10 that they could be used for that purpose.

11 Now, I was asked by Mr. Cash for opening
12 presentations. Feel free to roam around this
13 room. As long as you don't distract people,
14 you can do it any way you want, any way you
15 think you can be persuasive and explain this
16 case to this panel.

17 Okay. So if everybody is ready?

18 MR. CASH: Actually, I want to kind of
19 revisit something you said about the
20 condition of the land as it exists and what's
21 going to be applied.

22 THE HEARING OFFICER: Correct.

23 MR. CASH: Here's the issue -- and I think
24 it's important that we sort it out before we
25 start. As I understand, the landowners will

1 concede that certain of the property, the
2 220 acres, is now a submerged wetland;
3 certain is not. But the part that is
4 submerged they will say is submerged because
5 it's our fault, either subsidence or
6 impoundment; and they will ask this panel to
7 apply an elevated standard to that currently
8 undisputedly submerged wetland.

9 That would be an inappropriate -- that
10 would be an inappropriate exercise for a
11 number of reasons. One, it would be beyond
12 the scope of the rules that would allow this
13 panel to do that. But, more importantly, we
14 have made no limited admission about the
15 effects of impoundment or about the effects
16 of subsidence. And to allow a standard to be
17 applied to something that does not currently
18 exist would be basically to have us being
19 responsible for either subsidence or
20 impoundment when that is not within the scope
21 of our limited admission.

22 THE HEARING OFFICER: I think the limited
23 admission speaks for itself. It was filed.

24 MR. CASH: Yes.

25 THE HEARING OFFICER: Okay. I think the

1 issue is understood. I understand their
2 argument and I understand your argument.
3 Again, I'm not going to decide this; they're
4 going to decide this. I think they -- I've
5 conferred with them last week. They
6 understand what the issue is. Okay.

7 So the only thing I said to you -- and I
8 think it's important, by the way -- that if,
9 if some of this property, if it's not all
10 submerged, one of the questions that -- you
11 know, you're dealing with a lot of property
12 here. And is there some way to, you know,
13 lay out for this panel, is it all submerged?
14 Is part of it submerged? et cetera. Those
15 are questions I'm sure they're interested in
16 hearing and any data that addresses that
17 issue.

18 I will -- the only comment I'll make to
19 you is I'm not saying to you that I'm making
20 a ruling on relevance. Most of the time I'm
21 going to make a ruling on relevance.

22 I just think that as I read through
23 everything -- and I did read -- I personally
24 read through everything for one reason only:
25 So I can try to make intelligent rulings.

1 They may be wrong, but I'm going to try to --
2 hopefully, I'm going to have some
3 understanding.

4 I personally, me, Tom Balhoff,
5 understand that a key issue from their
6 standpoint is this issue that salt caused it
7 to subside. I understand your argument that
8 it doesn't matter.

9 DNR is supposed to apply -- you've got a
10 piece of property and you apply the standards
11 to that piece of property.

12 I totally get the argument, and without
13 me taking a position on whether I agree or
14 disagree, the only thing I said was, to the
15 extent -- we're not taking a week for that
16 kind of testimony or, you know, if they're
17 going to put somebody up like Mr. Gagliano,
18 or somebody else, Mr. Castille, I don't
19 know -- I'm going to let the panel just hear
20 that particular evidence assuming it doesn't
21 go too far afield.

22 Having said all that, I totally
23 understand your position and it may be a
24 hundred percent correct.

25 MR. CASH: Okay.

1 THE HEARING OFFICER: Okay?

2 MR. CASH: Okay.

3 THE HEARING OFFICER: Just so everybody
4 understands where we're at. Okay? Because I
5 want this hearing to be fair. And you've got
6 another step. We're just a step along --
7 we're -- this is just one step along this
8 process.

9 And presumably the landowner, of course,
10 regardless of what this -- the most feasible
11 plan says, the landowner, I have no idea what
12 their plans are in state court; but
13 presumably they have reserved whatever rights
14 in the state court. I totally get that too.

15 MR. LAPEZE: One more point of administrative
16 order, Mr. Balhoff. This morning
17 Ms. Daschbach and I talked about this. To
18 try to make your life easier, we've put
19 together a running list of exhibits that have
20 been admitted to date without objection.

21 One particular exhibit that I want to
22 make sure that we're clear on the record
23 about is our Exhibit 1, which is in globo,
24 the feasible plan that Hess has put together
25 in this case, along with the appendices to

1 that plan and the addendum that you've
2 already made reference to.

3 And you've already noted for the record
4 that the appendices include some of the
5 expert reports that were constructed in the
6 litigation, including Dr. Koob's report. We
7 also have the reports of Dr. John Rodgers,
8 John Frazier, Glenn Millner, and -- I know
9 I'm forgetting one -- Dr. Koob.

10 And we want to be very clear for the
11 record that the purpose of us including those
12 reports as appendices is only for the purpose
13 that we've discussed here: For the purpose
14 -- to the extent that those opinions bear
15 upon current site setting and the soil
16 remediation plan. Those reports bear on
17 issues like groundwater, some of them do.
18 And the reports do bear upon, as you
19 mentioned, Dr. Koob's opinions, where she
20 talks about historical topography of the
21 property.

22 So we want to just be clear that we're
23 not submitting those reports for any purpose
24 other than current site setting and as they
25 bear upon soil remediation, and we don't want

1 there to be considered any sort of waiver of
2 our objection of relevance that you've
3 mentioned because we put the entirety of
4 those reports in the record.

5 And to make things clearer, we can go
6 through and we can redact out the portions
7 that deal with --

8 THE HEARING OFFICER: No, no, no, you don't
9 need to do that. I understand that there are
10 things addressed that deal with media that
11 this panel is not considering. And, quite
12 frankly, it was helpful to have those things
13 as appendices to refer to.

14 MR. LAPEZE: That was the purpose of us
15 including them, so ...

16 THE HEARING OFFICER: Okay. So, you know, I
17 may change some of my thoughts as we go if
18 for some reason this thing is veering in a
19 direction I don't expect it to. But, you
20 know, hopefully this is going to be -- as all
21 the ones that I've been involved in the past,
22 it's going to be -- both sides are extremely
23 professional and the witnesses extremely
24 professional.

25 So having said that, Mr. Cash, it's your

1 floor.

2 MR. CASH: One more thing before we go. And
3 this is more just a housekeeping thing for
4 you-all for scheduling, and Glad and I talked
5 about this last night.

6 We have a witness, Mr. Frazier,
7 Dr. Frazier, who will be here tomorrow.
8 Mr. Millner will not be able to be here 'til
9 Monday. I anticipate that Dr. Frazier will
10 not be a long witness.

11 Rather than waste an afternoon of
12 working time for this panel, what we had
13 suggested -- and I think Mr. Jones is okay
14 with -- is they can begin their case before
15 we put Mr. Millner --

16 THE HEARING OFFICER: That's fine. No
17 problem.

18 MR. CASH: Just so we use all the time. So I
19 wanted to alert you to that.

20 THE HEARING OFFICER: No, that's perfectly
21 acceptable.

22 MR. CASH: Okay.

23 THE HEARING OFFICER: Okay. The floor is
24 yours.

25 MR. CASH: All right. Thank you.

1 Listen, I know you-all are scientists
2 and you'd rather hear from a scientist than
3 from a lawyer or anybody else, so this is not
4 going to be a long opening. I just kind of
5 want to frame some issues and I think it will
6 help as we go along.

7 If I can get my clicker to work.

8 This is when I miss those old flip
9 charts.

10 All right. Here we go.

11 As you pointed out, Hess made a limited
12 admission. The context of the limited
13 admission and basically the guts of it are
14 right there in that first paragraph. This
15 involves approximately 220 acres, more or
16 less, in Lafourche Parish.

17 The thing that's important to note for
18 this hearing is that Hess' limited admission
19 pertains solely to environmental damage to
20 soil arising from exploration and production
21 activities conducted by Hess and its
22 corporate predecessors.

23 It does not involve, as you pointed out,
24 groundwater. It does not involve surface
25 water. It does not involve subsidence. It

1 is not an admission of impoundment. It is
2 none of those things. It is only about the
3 soil, and so that's the presentation we're
4 going to make.

5 Another thing: You saw the plan. Okay.
6 I am not going to take up your valuable time
7 having each of our experts go through and
8 basically repeat the plan in its entirety to
9 you. I'm going to have them explain things.
10 And, more importantly in this process -- and
11 I think this is an important difference from
12 a trial -- you-all have the ability to adopt
13 a plan or to fashion a plan. So we're really
14 here, our witnesses are here more than
15 anything to assist you in your job, to assist
16 you in determining what is the most feasible
17 plan because you have the responsibility to
18 recommend that to the Court.

19 And so I know, having participated
20 before in some of these, I know that you all
21 will ask questions and I think we, we welcome
22 that. We want you to have the information
23 that you feel you need; and to the extent
24 that that information isn't available, to
25 give us guidance on what you will need. All

1 right?

2 Okay. This is the plaintiffs' property.
3 This is the 220 acres. This is where Hess
4 has historical operations, and so this is the
5 area where we operated or our predecessors.
6 This is where we are claiming responsibility
7 for the soil only and for the remediation to
8 29-B standards of that soil.

9 Within that 220 acres, we will present
10 to you eight AOIs, or areas of interest.
11 Those areas of interest were analyzed
12 initially by the plaintiff, and they were
13 analyzed for 29-B parameters.

14 AOI 1 had exceedances of oil and grease
15 and true total barium.

16 AOI-2, true total barium.

17 And we'll go through this in more
18 detail. So I'm zipping through right now
19 because I know you want to get to the
20 science.

21 AOI 3, oil and grease exceedance.

22 AOI 4, true total barium.

23 AOI 5, oil and grease.

24 AOI 6, oil and grease.

25 AOI 7 -- not moving.

1 Okay. When I was a baby lawyer, we had
2 flip charts and drawings and those always
3 worked.

4 All right. AOI 7 was a NORM hit, as was
5 AOI 8.

6 And those are the AOIs that we'll be
7 discussing with you and that we plan to
8 remediate to 29-B standards.

9 All right. So what went into the most
10 feasible plan? What were the two factors?

11 The site is a submerged wetland, and
12 we'll provide you evidence of that.

13 Some of the things that we looked at is,
14 first and foremost, we want to minimize any
15 necessary disturbances to submerged wetlands.
16 We don't want to --

17 THE COURT REPORTER: Slow down just a little,
18 please.

19 MR. CASH: Yes, ma'am.

20 THE COURT REPORTER: You're going really
21 fast.

22 MR. CASH: Okay.

23 THE COURT REPORTER: Thank you.

24 MR. CASH: We don't want to come up with a
25 plan that does more harm than good. There's

1 no reason to do that.

2 We need to control unnecessary
3 disturbance to the current operator, because
4 there is a current operator out there.
5 Hilcorp is out there and we have to foster a
6 plan that doesn't disturb their legal rights
7 to be there and conduct their oil and gas
8 activities.

9 And most importantly, we have to comply
10 with 29-B. So that's what went into this
11 particular plan.

12 Now, one of the things that you'll
13 notice, we do not have salt parameters in our
14 plan, and the reason is there are no salt
15 parameters for a submerged wetland, and
16 that's what we have here is a submerged
17 wetland.

18 How do we know that? We look at the
19 definitions.

20 An upland area is an area not identified
21 as a wetland, including farmland, pasture
22 land, recreational land, or anything like
23 that. We're not going to see an upland, an
24 upland area here.

25 An elevated wetland is a wetland area

1 which is not normally inundated with water,
2 and where land mass and levee material -- and
3 land mass is important here -- are available
4 for mixing with waste fluids during the
5 closure of a pit.

6 So you have to have a volume of land
7 mass available.

8 And then, of course, there's a submerged
9 wetland: A wetland area which is normally
10 inundated -- not constantly, not irrigated --
11 normally inundated with water where only
12 levee material is available for mixing with
13 waste fluids during the closure of a pit.
14 What you're going to find out here is a
15 submerged wetland area.

16 One of the things that we're going to
17 do, because we can't put you in a bus and
18 take you out to the property today --
19 although, I understand that you may be
20 visiting the property later. But for today's
21 purposes, we've basically taken a
22 photographic tour of the property. And
23 during the presentation, you'll see where you
24 see X's or crosses at various places across
25 the whole breadth of the 220-acre property,

1 and we will show you photographs that
2 demonstrate that this is in fact a submerged
3 wetland, some of the areas, just to give you
4 an idea of what you're going to see in that
5 submerged wetland area.

6 The CEI report of plaintiffs' experts
7 describes the property. And the subject
8 property in the Raceland oil and gas field
9 generally exists in a submerged landscape.
10 CEI's expert report has three samples that
11 are collected inside the 220-acre boundary.
12 You'll see from the evidence that they
13 encountered standing water at all three of
14 the locations.

15 ICON's expert report says this area is
16 now a semipermanent flood and flotant marsh.
17 And Mr. Miller, their expert, testified in
18 deposition:

19 "Would you agree with me, as we sit here
20 today, this property meets the definition of
21 an inundated wetland?

22 "Answer: It does today."

23 So what we have here in this 220-acre
24 area is an inundated wetland.

25 Now, that may be more an academic

1 exercise, quite frankly, than an exercise for
2 you-all to worry about on a most feasible
3 plan, and here's why: In the zero- to
4 four-foot area, the root zone, this is
5 plaintiffs' salt plume (indicating). All
6 right? Right there. It's the only salt
7 plume in the zero-to-four foot inside the
8 entire 220 acres.

9 We have -- and I think if you look,
10 we're going to be able to show you
11 photographs from the top of that salt plume
12 to the bottom of that salt plume, so that you
13 can see photographically what kind of
14 conditions are encountered up and down that
15 salt plume.

16 And they're going to be submerged
17 wetland from top to bottom, standing water
18 throughout, inundated, normally inundated,
19 regularly inundated.

20 And, in fact, if you look here, you'll
21 see that the only dry spot is the built-up
22 road.

23 This is what you're going to find
24 throughout that area, top to bottom.

25 So regardless of where they try to say

1 we have an elevated wetland, it's going to
2 become very clear that in the only area where
3 it matters, it is in fact an inundated
4 wetland, or a submerged wetland.

5 We talked about current operations. You
6 saw where our 220 acres are. From Hilcorp's
7 deposition, their 1442 representative told us
8 this is where their current operations are,
9 and those are the operations we have to be
10 sensitive to.

11 So what are we going to do? At the end
12 of the day, we're going to excavate in AOI 3,
13 4, 5, 6, 7, and 8. We're going to ask you
14 for passive closure in areas 1 and 2 because
15 we believe they would do far more harm than
16 good, and the evidence will show it would do
17 far more harm than good to disturb what is a
18 thriving environment in order to remove small
19 spots of oil and grease.

20 These strikes are surgical. We want to
21 dig up as little of this marsh as is
22 possible.

23 In AOI 3, about 19 cubic yards; AOI 4,
24 347; roughly 3,000 in AOI 5; AOI 6 is about
25 450; AOI 7, 80; and AOI 8 ...

1 The cost, approximately \$3 million.

2 We have submitted to you what we believe
3 is a feasible plan that meets all of the key
4 factors of a most feasible plan. It is the
5 only plan that has been presented to you.
6 Despite hundreds of thousands of dollars
7 spent on experts; and certainly the ability
8 and the right to submit their own competing
9 plan, plaintiffs have chosen not to do so.

10 And I don't think that was by accident
11 or because they couldn't. I think they did
12 not want that plan to have to deal with the
13 scrutiny of this panel. So, instead, they
14 make comments. They basically will take
15 shots at our plan, hit it here, hit it there.

16 But at the end of the day, we have come
17 up with a plan that is workable, that is
18 permittable, that will take about three
19 months to do once it is permitted, that
20 addresses 29-B exceedances, and most
21 importantly, preserves a thriving
22 environment, a thriving marsh, without coming
23 in and destroying it.

24 Our plan does more good than harm. And
25 isn't that really the goal of this panel?

1 Thank you.

2 THE HEARING OFFICER: Mr. Jones?

3 MR. JONES: Thank you.

4 I do it the old-fashioned way. I've had
5 that happen to me too many times.

6 Just in case something breaks here.

7 THE COURT REPORTER: Do you have one for me?

8 MR. JONES: I'm sure we do. You know what.
9 Here, I'll give you mine.

10 THE HEARING OFFICER: She will get one.
11 That's okay.

12 MR. JONES: All right. Thank you.

13 Mr. Balhoff, thank you for your opening
14 comments and for being our commissioner --
15 our officer, hearing officer in this.

16 Mr. Pennington, Ms. Love --

17 THE HEARING OFFICER: Is your mic on? I
18 can't --

19 MR. JONES: You know what, they decided not
20 to give me one.

21 Is that better? Is that better, Mr.
22 Balhoff?

23 THE HEARING OFFICER: Yes, that's fine.
24 That's good.

25 MR. JONES: Mr. Balhoff, thank you for

1 serving as our hearing officer.

2 Mr. Pennington, Ms. Love, Mr. Campbell,
3 nice to see you and thank you for your time
4 to this matter.

5 I want to put on the problems that
6 Raceland has envisioned in the plans that has
7 been submitted by Hess. Mr. Cash is exactly
8 right. We submitted a comment to their plan,
9 and what we want to do is focus in right on
10 what happened on this particular piece of
11 property and what the condition is today and
12 what the rules are that we do not believe
13 that Hess has been following or intends to
14 follow with regard to its plan that it has
15 submitted.

16 I want to jump in right where Mr. Cash
17 started -- left off. We haven't talked about
18 this thriving environment out there. I think
19 that that's very important for this panel to
20 have kind of an overview of what has happened
21 on this property since 1941 and over the
22 course of about 60 years or 65 years that
23 Hess operated on the property.

24 Here's an overlay, overhead photograph,
25 that was taken in 1941, and here's what it

1 looked like in 1973. This is the area that
2 is encompassed in the 220 acres that Mr. Cash
3 just referred to (indicating).

4 We can look at what this looked like in
5 1941: A thriving forest, cypress forest
6 there. And then we have to take a look at
7 1973. We can look at what the impacts are
8 kind of from wherever this photograph was
9 taken, 10,000, 5,000 feet, and look down and
10 have a pretty good idea of the overall
11 condition of the property. It does not look
12 like a thriving environment compared to what
13 it was in 1941.

14 At any rate, the case was filed out of
15 Lafourche Parish. And as Mr. Cash noted,
16 Hess came in and made a limited admission.
17 And it limited its admission, if we take a
18 look at the area, Hess' admission is limited
19 to soil.

20 Once Hess does that, there is a process
21 set up by the Louisiana Code of Civil
22 Procedure that says that we are to come to
23 you to submit and try to arrive at and
24 implement a most feasible plan to evaluate
25 and, if necessary, remediate all or a portion

1 of the contamination that is the subject of
2 the litigation.

3 Of course, moving back, all we're
4 talking about in this particular hearing is
5 the soil. But it is the soil importantly for
6 the 220 acres.

7 Now, what happens when that happens? We
8 have to take a look at the different rules:
9 The Office of Conservation, Department of
10 Natural Resources, that Mr. Balhoff has
11 mentioned, seriously. We can take a look at
12 some: Mineral exploration and production
13 sites shall be cleared, revegetated,
14 detoxified, and otherwise restored as near as
15 practicable to their original condition upon
16 termination of the operations to the maximum
17 extent practicable."

18 Now, what's important in that part, in
19 that analysis, is that we take a look -- and
20 this is right from Hess' plan. What's very
21 critical to allow this panel to get to the
22 point that it can make a decision on what
23 constitutes the most feasible plan is that a
24 whole bunch of rules are triggered once this
25 admission is made. It's their choice, if

1 they don't want to admit to the groundwater
2 that they contaminated or whatever medium it
3 is, they get to do that. The law sets that
4 up.

5 But once they do it to a particular
6 medium -- in this case soil -- they are then
7 under an obligation to proceed and follow the
8 rules set forth in LAC 43; otherwise 29-B.

9 The important one for this particular
10 hearing that we're going to go through and
11 that we're going to really focus on is
12 whether or not Hess followed the Chapter 6
13 very clear rule that says, "Each plan shall
14 fully delineate the vertical and horizontal
15 extent of the environmental damage."

16 The question is: Did they, Hess, when
17 they went out there and they did this
18 evaluation over the course of the last two
19 years or so, whether or not they have fully
20 delineated the vertical or horizontal extent
21 of the environmental damage.

22 Here is the various AOIs that Mr. Cash
23 pointed out that Hess has proposed to go out
24 and remediate. Let's take a look.

25 This is the property, the 220 acres,

1 without the AOIs or any other markings for
2 the parties.

3 Here is the salt plume from zero to four
4 feet that has been discovered by the various
5 experts.

6 If we go from zero to eight feet, we can
7 see that that area is expounded.

8 We go out to zero to -- down to zero to
9 12 feet, it's further expounded.

10 And then we can take a look at all the
11 metals and hydrocarbons, and we'll focus in
12 on this on where they were found on various
13 areas of the property.

14 This particular, this particular slide
15 is going to indicate exactly where the metals
16 and the salt plumes are found and compare
17 them to the various limited areas that Hess
18 is going to set about, propose to remediate
19 as we go forward.

20 The question for this panel as we see
21 it: What is the scope of Hess' limited
22 admission? Has Hess admitted to all the soil
23 on the 220 acres, or is Hess' submission
24 limited to eight AOIs?

25 It seems to me that, based upon

1 Mr. Cash's representation this morning, it's
2 very clear that Hess has now admitted to all
3 soil that is contaminated on the 220 acres.

4 Does Hess' plan sufficiently address the
5 contamination within that scope?

6 Has Hess sufficiently delineated the
7 vertical and horizontal extent of
8 contamination as required by Chapter 6?

9 And does Hess' plan comply with 17 --
10 719(M), as we discussed a little bit earlier?

11 Here's the definition. Mr. Cash covered
12 that. The wetland area which is normally
13 inundated with water and where only levee
14 material is available.

15 We have gone and done the same thing
16 they have. We've gone right out to AOI 1 --
17 and, in fact, these are photographs taken
18 from their consultants, GHD reliance
19 documents. And we can just take a look at
20 AOI 1. It's not an inundated area at all.

21 AOI 2, same.

22 We're going to walk through each one of
23 these areas using their photographs to show
24 that historically -- Mr. Balhoff talked about
25 historical use. And where that's going to

1 come into play, we're going to talk a little
2 bit about historical use and how this is firm
3 ground, and how people can walk on it in many
4 of these areas.

5 For example, here in AOI 3, people can
6 still walk in these areas.

7 There's one of their consultants out
8 there in AOI 4.

9 AOI 5, 6, 7, and 8.

10 We have -- we already talked a little
11 bit about the historical use of this property
12 because we think that that's important that
13 you-all understand how this property has
14 typically been viewed by historians,
15 geographers over the years.

16 And this is the point I just made: The
17 soil is generally moist, but firm enough to
18 bear up men at all times and cattle in dry
19 weather.

20 Mr. Cash had it wrong just a little bit,
21 that he believes that we're going to take the
22 position that it's all -- that none of it is
23 inundated. No, some of this is going to be
24 inundated and some of it is not; but much of
25 the area where it's not inundated at the end

1 of the day is where Hess failed to go out and
2 do the Chapter 6 delineation that the rules
3 require.

4 So these are various sites that have
5 been cleaned up and are part of the pit files
6 of the Department of Natural Resources. We
7 know that the Department of Natural Resources
8 personnel went out and took a look at the
9 pits right here and called this, called these
10 elevated pits.

11 There's a number of these from right in
12 the vicinity of the Raceland field that we
13 will go through that I've highlighted here.

14 Of course, we know what the difference
15 is, is that if in fact there is some part of
16 this, that this property is an elevated
17 wetland versus a submerged wetland, then we
18 know that the requirements of Chapter 6 are
19 triggered; that they have to go out and
20 delineate the, delineate the salt as well as
21 the metals and the other constituents.

22 Let me go through this for just a
23 second. We covered some of that.

24 There is no dispute in this case that,
25 according to Hess' own experts, that this

1 property, to the extent that there is
2 inundation in these particular 220 acres that
3 was caused by Hess, and we've submitted
4 deposition testimony.

5 Mr. Edwards, who I think will be their
6 first witness, will testify that it's his
7 belief that this area is the area that was
8 impacted by Hess' operations, which caused
9 the inundation.

10 We do need to focus on what the
11 definition of "contamination" is: "The
12 introduction of substances and contaminants
13 into a groundwater aquifer, or USDW or soil
14 in such quantities as to render them unusable
15 for intended purposes."

16 What is the intended purpose of this
17 property?

18 I'll go back to 1941. This was a
19 cypress forest with a thick stand of trees,
20 certainly not an inundated area.

21 One of the other issues that we're going
22 to cover with our experts is we're going to
23 walk through the different AOIs and talk
24 about the constituents which are going to be
25 proposed to be left on the property.

1 This one in particular, Hess is
2 proposing that there be a passive closure.
3 Well, we're going to need to talk about
4 exactly what that means in terms of the
5 constituent levels that are going to be left
6 on the property: Four percent oil and
7 grease; TPH-D 2910 at two feet, and on and
8 on.

9 We do not think the passive closure for
10 AOI 1 or 2 is consistent with the rules that
11 intend to demonstrate this.

12 This would be the same thing for AOI 2.

13 It's pretty clear under the rules that,
14 for a passive closure under Section 8 or
15 Section 313H, that "an Affidavit of No
16 Objection from the Landowner endorsing the
17 operator's request for passive pit closure be
18 in hand." And, of course, as Hess recognized
19 in its original July 14 report, they have no
20 such affidavit from the landowner and will
21 not receive an affidavit from the landowner.

22 Here's what we will suggest and that we
23 will put on evidence during this hearing: A
24 laundry list of rules that Hess has broken.

25 Hess ignores areas where oil and grease

1 exceed 29-B standards. We'll demonstrate
2 that.

3 Hess fails to use the proper method for
4 delineation.

5 Hess assumes the entire site is
6 submerged to avoid delineating salt.

7 Hess ignores salt contamination despite
8 its impact on the cypress survival.

9 Hess fails to delineate soil at AOIs 7
10 and 8 -- which is where they have radiation
11 detections and they have failed to do a
12 sweeping 29-B testing.

13 Hess advocates for passive closure
14 despite the objection of the landowner.

15 I will repeat the questions. Here's the
16 problem with their plan.

17 Hess' plan does not comply with the most
18 basic rules and should be rejected. The
19 panel should restructure a new evaluation
20 plan to delineate fully the horizontal and
21 vertical extent of the contamination. The
22 plan should indicate that the remediation
23 will cost at least in the \$3.2 million, as
24 proposed by Hess, subject to increase
25 depending upon the additional remediation

1 required after full delineation and
2 evaluation.

3 My closing comments to you are that on
4 October 24, as you all know, there was an
5 addendum submitted by Hess. It proposed some
6 hundred new samples. Our -- we would
7 respectfully request that -- and I realize
8 that the Hearing Officer has ruled on that
9 and that that's going to be considered a part
10 of the original plan.

11 Here's the thing about that: What
12 you-all do matters. It matters in this
13 process here. It's going to matter in our
14 civil case, the civil case down in Lafourche
15 Parish.

16 Of course, the Hearing Officer is
17 correct: We're not at the end of the road
18 here. We have that, we have that process. I
19 know you-all have sat through these before.

20 But I would ask you to consider that
21 what you-all do really does matter here to
22 what happens at that trial. It has the right
23 to impact Hess' rights, it has the ability to
24 impact the landowners' rights, and so it
25 really does matter.

1 And my point with regard to the addendum
2 is this -- and I made this point, but I want
3 to make it again -- is that if Chapter 6 says
4 Hess' obligation is to go out to the property
5 and delineate the identified contamination on
6 that property arising from its operations to
7 which it admitted to, if that's what the
8 rules are, hold them to that rule. Tell them
9 that their obligation is to go out, identify
10 the soil contamination, identify whether or
11 not, in fact, 220 acres is submerged versus
12 elevated, all of which they had not done.

13 And the reason that that's important is
14 because they're going to have a number from
15 you-all estimating what the cost of the
16 valuation of remediation is going to be. And
17 given the fact that on October 23, literally
18 less than a month ago, nearly three weeks ago
19 or so, they have come back and proposed to do
20 more samplings at their AOI 1 to delineate
21 the horizontal and vertical extent of the
22 contamination, which, of course, we're going
23 to suggest that they had two years to do
24 before they did that.

25 The end result is, is that that is a

1 rule. The rule has to stand for the
2 proposition that, before they can say what
3 their remediation is going to be, they have
4 to be able to suggest to you what the results
5 of those Chapter 6 delineation definition of
6 a horizontal and vertical extent of the
7 contamination will be.

8 It's not enough at this point to bring
9 in an expert, very fine qualified man, to
10 testify about what his opinions are about the
11 extent of the contamination. Your rules
12 require under Chapter 6 that that delineation
13 be defined, and not guessed at, no expert
14 opinions; rawly taking data and making
15 decisions based upon data.

16 And if the panel -- which I know you
17 will -- if the panel will do and apply those
18 rules fairly, all parties' rights will be
19 protected now as we move on to our other
20 pastures with regard to this case.

21 So I want to thank you. I want to thank
22 all the members of the panel. We look
23 forward to working with you efficiently and
24 quickly.

25 THE HEARING OFFICER: Mr. Cash, your first

1 witness.

2 MR. LAPEZE: Mr. Balhoff, we call Mr. Frank
3 Edwards.

4 THE HEARING OFFICER: Now, before -- are you
5 going to sit?

6 THE WITNESS: I was going to stand, if
7 possible.

8 THE HEARING OFFICER: Let me just give you
9 this direction.

10 Ms. Champion, it will help her if she
11 can see you speak, so keep that in mind.

12 If you have your back turned to her, she
13 might have more problems getting down what
14 you say.

15 THE WITNESS:

16 Yes, sir.

17 Can you hear me?

18 THE HEARING OFFICER:

19 Well, it's more than hearing. She's got
20 to be able to get what you say.

21 THE WITNESS: I'm trying. I haven't had much
22 success.

23 MR. CASH: I'm a jack of all trades. I'll
24 help him.

25 THE HEARING OFFICER: Okay. Now, before we

1 start, I'm going to ask Ms. Champion.

2 Would you please swear the witness in,
3 please.

4 WHEREUPON, FRANK DAVID EDWARDS, having
5 been duly sworn, testified as follows:

6 DIRECT EXAMINATION

7 BY MR. LAPEZE:

8 Q. Good morning, Mr. Edwards.

9 A. Good morning.

10 Q. Can you please state your full name and
11 business address for the panel, please.

12 A. Yes. Frank David Edwards. I'm employed at
13 551 Corporate Boulevard, Baton Rouge, Louisiana.

14 Q. And where are you currently employed,
15 Mr. Edwards?

16 A. At A company called GHD.

17 Q. And your employment with GHD is fairly
18 current -- fairly recent, isn't it?

19 A. July of 2014, yes, sir.

20 Q. Okay. And where did you work before you went
21 to -- began work with GHD?

22 A. A company called Conestoga-Rovers &
23 Associates, CRA.

24 Q. And explain how Conestoga-Rovers and GHD are
25 related.

1 A. Okay. In July of 2014, GHD merged with
2 Conestoga-Rovers. So it's basically the same company,
3 just a bigger merged company.

4 Q. And so for the purposes of the record, some
5 of the work that you did was when you were with
6 Conestoga-Rovers and some of the work was with GHD,
7 your current workplace?

8 A. That is correct.

9 Q. And, Mr. Edwards, I'll hand you a copy of
10 your CV.

11 MR. LAPEZE: And, Panel, this is going to be
12 found under Tab 5 of the exhibit book that
13 Hess handed out.

14 THE HEARING OFFICER: Yes. They have got the
15 exhibits behind them if they want to reach
16 for them.

17 MR. LAPEZE: Okay.

18 BY MR. LAPEZE:

19 Q. Mr. Edwards, this is a current copy of your
20 CV?

21 A. It is.

22 Q. And before we begin with your work history,
23 just take the panel a bit through your education,
24 please.

25 A. Yes, sir.

1 I have a bachelor of science in chemical
2 engineering from Louisiana State University 1983.

3 Q. After earning your degree from LSU in 1983,
4 tell us a bit about your work history.

5 A. Upon graduation I went into the environmental
6 consulting business. I started with a company in Baton
7 Rouge called Geotechnical and Environmental
8 Engineering, Inc., G&E Engineering. I worked there
9 from '83 to '86, which was right at the time in which
10 Gulf was being acquired by Chevron. So I did a lot of
11 due diligence on behalf of Gulf of divestiture of their
12 assets to Chevron, and that included the assessment and
13 closure of hundreds of E&P pits in south Louisiana.

14 Q. Now, the E&P pits that you were assessing
15 between 1983 and 1986, that was before the amendment to
16 29-B; correct?

17 A. That is correct.

18 Q. And what tool did you use to close the pits?

19 A. At the time we were using Lloyd Doole's --

20 THE COURT REPORTER: I'm not hearing you.

21 You have to speak louder or come closer to
22 me.

23 THE WITNESS: How about now? You got it?

24 We worked under the guidance developed
25 by Dr. Lloyd Doole, who at the time I think

1 was a professor at Texas A&M.

2 That guidance was subsequently
3 incorporated into the amendment of 1986 29-B
4 pit closure standards.

5 The companies were, at least Gulf in
6 particular, was anticipating the amendment of
7 1986 and was trying to address these pits in
8 advance of that amendment being promulgated.

9 BY MR. LAPEZE:

10 Q. Okay. In 1986, where did you go to work?

11 A. In 1986 I went to work for a company called
12 Geraghty Miller & Associates. It is now known as
13 Arcadis. It was bought out by Arcadis. I worked at
14 Geraghty & Miller from 1986 to 1993.

15 Q. And what kind of work did you do for Geraghty
16 Miller?

17 A. At Geraghty & Miller, I was primarily the
18 project manager for Superfund sites throughout the
19 United States, looking at developing feasibility
20 studies, remedial implementation plans; Superfund
21 sites, doing site assessments.

22 I also had significant amount of experience
23 in the RCRA sites, Resource Conservation and Recovery
24 Act, which is downstream of the chemical plants and
25 refineries. And most of that was in the Gulf Coast

1 area.

2 The Superfund sites were throughout North
3 America -- or throughout the United States.

4 Q. And you also had some work experience working
5 on CERCLA sites as well; correct?

6 A. Correct, that being the Superfund sites.

7 Q. Superfund sites, right. Sure.

8 About how many sites have you worked on in
9 your experience with Geraghty & Miller?

10 A. CERCLA, RCRA, or altogether?

11 Q. Altogether.

12 A. Altogether. Hundreds. Probably over 300.

13 Q. Okay. And you left Geraghty & Miller in
14 1993; correct?

15 A. Yes, sir.

16 Q. And then where did you go?

17 A. I went to a company called Aquaterra, Inc.
18 That was an environmental consultant for a division of
19 Great Lakes Chemical Corporation.

20 Q. And what kind of work did you do at
21 Aquaterra?

22 A. I was both an in-house consultant to Great
23 Lakes Chemical Company Manufacturing Facilities, of
24 which they had four in south Arkansas. They were a
25 bromine producer, so they used brine to extract the

1 bromine. I assisted them with their environmental
2 issues associated with brine salt leaks.

3 In addition, I had external clientele, which
4 included the upstream market at the time, oil and gas
5 exploration operations; and worked also in refineries
6 and chem plants throughout the Gulf Coast.

7 Q. And then in 1999 you went to work for CRA;
8 correct?

9 A. That's correct.

10 Q. Okay. Tell me about the focus of your work
11 with CRA.

12 A. The majority of my work at CRA has been on
13 the upstream side: Deconditioning fields, plugging
14 abandoned wells, closing pits, and in dealing with
15 legacy litigation.

16 Q. Okay. And you're currently with GHD you
17 said; correct?

18 A. That is correct.

19 Q. And tell us about your current work with GHD.
20 What kind of work do you do on a regular basis?

21 A. Do site assessments, developing feasibility
22 studies to identify remedial action plans, implementing
23 those remedial action plans, and also obtaining
24 negotiations with the agency to get those plans
25 approved and the closures approved.

1 Q. What agencies do you interact with in that
2 work?

3 A. I interact with both DNR and with the DEQ
4 within the state.

5 Q. And what is your role within GHD?

6 A. My title, my title is principal, which is the
7 highest shareholder level within the company, and also
8 vice president.

9 Q. And as you just mentioned, you've done quite
10 a bit of work with the DNR; correct?

11 A. Yes, sir.

12 Q. Okay. What type of projects have you worked
13 on in terms of your work with DNR?

14 A. Pit closures, site assessments and site
15 recommendations.

16 Q. In terms of pit closures throughout your
17 career -- not trying to hold you to a number today --
18 approximately how many pit closures have you been
19 involved with throughout your career?

20 A. Well, we started off in the GENI Engineering
21 days, when Gulf was trying to divest their assets,
22 we -- I probably did at least 120 pits in that
23 '83-to-'86 time period; probably another hundred in
24 between that and coming to work for CRA.

25 Just recently, within the past two or three

1 years, I think you may recall seeing a ton of closure
2 reports from me on the Lapeze field. We did about 120
3 there.

4 Q. And these are pit closures that are
5 accomplished within the bounds of Statewide Order 29-B;
6 correct?

7 A. Yes, sir.

8 Q. You've also done a lot of work with the LDEQ;
9 correct?

10 A. That is correct.

11 Q. And what kind of work have you done with the
12 DEQ?

13 A. With DEQ, we've addressed soil issues, as
14 well as groundwater issues under RECAP. I've been in
15 business in Louisiana since RECAP was developed in
16 1998. I worked using that original version. I worked
17 using the 2001 revision and then subsequently the 2003
18 revision.

19 Q. And within the scope of your broad experience
20 in general in dealing with environmental issues, as we
21 know, this limited admission hearing is -- only deals
22 with soil remediation. And you put together a soil
23 remediation plan for this case, have you not?

24 A. That is correct, I did.

25 Q. And give the panel a little snapshot of your

1 experience in dealing with soil remediation projects,
2 please.

3 A. Specific to 29-B, I think the panel, the
4 majority of you have seen some of my plans, some of our
5 closure reports.

6 But we -- I've dealt with a variety of
7 different closures under 29-B: Land farming, CERCLA
8 removals and off-site disposal, and passive closures,
9 and solidifications as part of my previous, my earlier
10 career.

11 Q. And does your experience include conducting
12 feasibility studies to determine appropriate remedies
13 for the sites?

14 A. It does. And my training there occurred
15 during my tenure with Geraghty & Miller under
16 Superfund. There's a very rigorous feasibility study
17 protocol in which you have a minimum of ten evaluation
18 criteria to look at, and that helped train me to become
19 more efficient in feasibility studies.

20 Q. In terms of your 29-B experience, have you
21 had the opportunity to use and implement the different
22 on-site management techniques that are defined under
23 29-B?

24 A. Yes, I have. That includes land farming,
25 passive closure, solidification, burial and trenching.

1 Because of our unique hydrology in this area,
2 it is a rarity that we can meet those criteria and be
3 able to use burial and trenching. So that's probably
4 what I've done the least of.

5 Q. In terms of passive closure, solidification,
6 soil extraction, and land treatments, you have
7 experience in all these different management options?

8 A. I do. I do.

9 Q. And in terms of plan design and plan
10 implementation for remediation under 29-B, you have
11 on-the-ground experience in terms of implementing
12 those -- designing those plans and implementing those
13 plans under 29-B; correct?

14 A. That's correct. And also assuming
15 verification plans and implementing them correctly.

16 Q. In the hundreds of pit closures that you've
17 been involved with in your career, have you had to take
18 into account different site-specific conditions in
19 order to determine the applicable closure standards
20 under 29-B?

21 A. Yes, sir, each and every one of those has a
22 unique site setting, which the applicable standards
23 have to match the setting.

24 Q. And we've talked about the different site
25 settings under 29-B today: Upland settings, elevated

1 wetland settings, submerged settings. Have you closed
2 oilfield pits in all three of these different settings?

3 A. I have.

4 Q. In your site assessment and remedial plan
5 design experience, has it required that you have an
6 expertise in soil chemistry?

7 A. Yes, especially the land-treatment aspect.
8 You have to understand how the constituents, once they
9 enter the environment: Will they biodegrade? Will
10 they move? All that are the key factors in how you
11 address it and how you treat it.

12 Q. And how have you had the opportunity to
13 develop an expertise in soil chemistry?

14 A. Starting with my educational background being
15 a chemical engineer, as probably Mr. Balhoff can attest
16 to you, you take a lot of chemistry. So that chemistry
17 background was very critical. But my 31 years of
18 experience also helped educate me on interaction of
19 soil chemistry and the migration of constituents
20 through that soil.

21 Q. And in terms of the vast experience that
22 you've already described, have any of the remediation
23 projects that you have been involved with in oilfield
24 sites been in south Louisiana?

25 A. Yes, a significant number of them. I'd say

1 at least 40 percent of them.

2 Q. And have those remediation projects been in
3 environments similar to what we see in the Raceland
4 field?

5 A. Yes.

6 Q. And I believe you already mentioned this:
7 You've actually closed over a hundred pits in the
8 Lapeze field? Is that correct?

9 A. That's correct. Approximately 120.

10 Q. And tell the panel about your work there.

11 A. We used primarily three different closure
12 techniques: Land farming, surgical removal and
13 off-site disposal, and passive closure.

14 Q. And you've been admitted as an expert before
15 in previous DNR -- before a DNR panel in a previous
16 limited admission hearing; correct?

17 A. I have.

18 Q. In what case was that?

19 A. That was Avahoula Resources, LLC.

20 Q. Okay. If I have this right, in the Avahoula
21 case, you were accepted as an expert in environmental
22 engineering with an emphasis in site investigation,
23 feasibility studies, corrective action studies, remedy
24 selection, remedial design and implementation,
25 remediation of oilfield E&P sites, and regulatory

1 compliance; is that correct?

2 A. Yes, sir.

3 Q. Okay. And based upon your experience, you
4 have expertise in all of those areas?

5 A. I do.

6 MR. LAPEZE: At this time, Mr. Balhoff and
7 Panel, I'd like to tender Mr. Edwards as an
8 expert in the same areas that he has already
9 been tendered and accepted as an expert in
10 the Avahoula matter, and that is as an expert
11 in environmental engineering, with an
12 emphasis in site investigation, feasibility
13 studies, corrective action studies, remedy
14 selection, remedial design and
15 implementation, remediation of oilfield E&P
16 sites, and regulatory compliance.

17 THE HEARING OFFICER: Just so I follow
18 this -- and I was in the hearing, so I know
19 he was accepted, but I just want to
20 correct -- corrective action -- what does it
21 say "Remedial site selection"? What were the
22 -- read it to me again.

23 MR. LAPEZE: Sure. It's a mouthful,
24 Mr. Balhoff.

25 It was environmental engineering with an

1 emphasis in site investigation, feasibility
2 studies, corrective action studies, remedy
3 selection, remedial design and
4 implementation, remediation of oilfield E&P
5 sites, and regulatory compliance.

6 THE HEARING OFFICER: Okay. Mr. Jones, you
7 want to voir-dire?

8 MR. JONES: I would. Thank you. Just a few
9 quick questions.

10 VOIR DIRE EXAMINATION

11 BY MR. JONES:

12 Q. Just so we're clear, because I'm not sure
13 that I'm going to challenge on you our expert
14 credentials; but I do want to ask you just a couple of
15 things that we discussed at your deposition.

16 Let me make sure the panel understands. You
17 do not consider yourself a wetland characterization
18 expert; is that correct?

19 A. I am not a wetland delineator.

20 Q. Okay.

21 A. That's right.

22 Q. You have never -- in all of that impressive
23 career that Mr. Lapeze just asked you about, you have
24 never rendered an opinion as to whether a particular
25 piece of property was either submerged or elevated;

1 correct?

2 A. As far as the applicable standards or as far
3 as whether the --

4 Q. I asked you this before. Let me do it again.
5 Have you ever offered an opinion as to whether
6 something was submerged or elevated, or an elevated
7 wetland before, in any of your work? I'm asking you
8 the same thing now.

9 A. Only through the use of the applicable
10 standards.

11 Q. Well, did you not tell me at your deposition
12 no, you had never offered an opinion as to whether a
13 particular piece of property was submerged or
14 wetland -- submerged or an elevated wetland?

15 A. I don't recall if I said that or not, but I'm
16 sure you'll show me.

17 Q. Well, I will. I will.
18 And, I mean, it's a simple question.
19 Have you ever --

20 MR. JONES: Can I approach him?

21 THE HEARING OFFICER: Yeah, you can.

22 MR. JONES: Thank you.

23 BY MR. JONES:

24 Q. Look at line 20. See 128, line 20.

25 A. The question from you?

1 Q. Yeah. I asked you: "Well, have you ever
2 offered opinion as to whether something was submerged
3 or an elevated wetland before?"

4 And your answer at line 23 was?

5 A. Am I looking at the wrong screen?

6 Q. 128.

7 A. I'm sorry.

8 I said, "No, the only time I've ever dealt
9 with these issues, I have staff that will do that on my
10 behalf."

11 THE HEARING OFFICER: Sir, read that answer
12 out loud again.

13 MR. JONES: Yes. Why don't I read the whole
14 thing.

15 THE HEARING OFFICER: Yeah.

16 MR. JONES: The question was: "Have you ever
17 offered an opinion as to whether something
18 was submerged or an elevated wetland before?"

19 And the answer -- just make sure I'm
20 reading it right -- at line 23, was: "No,
21 the only time I've ever dealt with those
22 issues, I have staff that will do that on my
23 behalf."

24 THE WITNESS: That is what I said.

25 MR. JONES: Okay.

1 BY MR. JONES:

2 Q. All right. So the reality is is that, while
3 you do have an impressive remediation CV, you have
4 never been rendered or tendered as an expert on what's
5 submerged or elevated wetlands; correct?

6 A. I have never been tendered as that expertise.

7 Q. In fact, you've never been asked to make that
8 analysis before; correct?

9 A. No, I disagree with you there. Every time we
10 close a pit --

11 THE COURT REPORTER: I'm sorry, I can't hear
12 you.

13 (Discussion off the record.)

14 BY MR. JONES:

15 Q. In this particular matter, you yourself, just
16 so our panel is clear, did not do an evaluation of
17 whether the property, the subject of the 220 acres, was
18 a submerged or an elevated wetland. I realize that you
19 had other people do it, but you yourself did not do
20 that. Correct?

21 A. I observed the site and saw the water.

22 Q. Well, but did you do an analysis as to
23 whether it was a submerged or wetland?

24 A. To that question, no.

25 Q. You did not. Okay.

1 So you're not going to be the person that's
2 going to tell this panel that this is a submerged or an
3 elevated wetland. Correct?

4 A. I'm going to be the person that shows the
5 data as to why it is a submerged wetland. Yes, sir, I
6 will be doing that.

7 Q. Okay. But just so we're clear: You do not
8 consider yourself to be a wetland characterization
9 expert?

10 A. Correct. I'm presenting the data from site
11 observations from other experts on our defense team
12 that will demonstrate that it is a submerged wetland.

13 Q. Oh, you're going to tell them what other
14 experts are going to say about submerged wetland?

15 I just want to understand --

16 A. I'm going to show the data that was generated
17 by all parties.

18 MR. JONES: Okay. All right. That's all the
19 questions I have.

20 THE HEARING OFFICER: Okay. He's going to
21 be -- write it down. I didn't get it
22 perfectly. He's doing to be accepted as an
23 expert as tendered. With that, we'll just go
24 ahead.

25 And just be aware that she's got to get

1 you down. So just don't speak too fast, and
2 just periodically try to remember, she's --
3 it helps her if she sees your lips moving.

4 THE WITNESS: Yes. And I apologize for that.
5 I am a soft speaker. So please, tell me amp
6 it up and I will.

7 THE COURT REPORTER: Thank you.

8 BY MR. LAPEZE:

9 Q. Mr. Edwards, what did Conestoga-Rovers and
10 now GHD have to do with the Raceland site?

11 A. In regards to this limited admission or
12 holistically?

13 Q. Well, let's talk holistically first, and then
14 with respect to the limited admission proceeding
15 itself.

16 But in terms of your initial charge and the
17 work that you've done to date, what has GHD been asked
18 to do at the Raceland site?

19 A. We were asked to assist in evaluating the
20 soil environmental conditions at the Raceland property,
21 address the allegations by the landowners regarding
22 that soil; and if there were issues that needed to be
23 addressed under 29-B, develop a path forward that would
24 be compliant with 29-B.

25 Q. And specifically with respect to this limited

1 admission proceeding -- let's focus on that now -- what
2 was GHD asked to do?

3 A. We were asked to focus in on the 220 acres
4 regarding the data that was collected from. Again
5 similar task, were there any 29-B compliance issues.
6 If so, where are they, how big are they, and develop
7 a -- conduct a feasibility study to determine the
8 appropriate path forward for the issues that do exceed
9 29-B, and then develop a feasibility -- a most feasible
10 plan to mitigate those issues.

11 Q. And are you prepared today to walk the panel
12 through the process by which you investigated the
13 Hess-operated area on the Raceland site?

14 A. I am.

15 Q. And are you prepared today to discuss the
16 soil remediation plan that you developed for the
17 purpose of this hearing?

18 A. I am.

19 Q. Okay. And with that, Mr. Edwards, I know you
20 put together a PowerPoint for the benefit of the panel,
21 and do you have the ...

22 A. I do, I have the clicker.

23 Q. If you could, if you could go ahead and walk
24 through those issues with the panel. I know you need
25 the PowerPoint to do that.

1 A. And some of this will be redundant of what
2 you've seen in the opening statements by Mr. Cash, but
3 I'm going to spend a little more time on them. I'm
4 going to talk to you as a scientist and engineer and
5 not as a lawyer.

6 THE HEARING OFFICER: You don't need to talk
7 to me. You need to talk to the members of
8 the panel.

9 THE WITNESS: Okay. In development of any
10 type of plan, you have to start off with what
11 are you bases and what are you trying to get
12 at, what are you trying to do, what are your
13 objectives.

14 So these are the most feasible plan key
15 factors that we considered in before we ever
16 got started as to what we wanted to do
17 regarding this site.

18 The first thing is the site setting.
19 That is critical in dictating what the
20 appropriate parameters are to be a
21 29-B-compliant plan.

22 I'm going to show you with a
23 preponderance of the evidence from the site,
24 including the plaintiffs' experts, say this
25 site is a submerged wetland as it exists

1 today. I'm going to take that data and then
2 show you how we used that in the most
3 feasible plan.

4 The other key criteria that you have to
5 consider is that it's not only a submerged
6 environmental setting, but it's a healthy
7 submerged environmental setting. And
8 whatever we do out there should account for
9 trying to protect that and minimize
10 disruption to it.

11 The third thing I'm going to talk about
12 is we have a current operator out there, and
13 that current operator is producing. And we
14 have to account for where his facilities are
15 and what his production is to try to minimize
16 any impact to that.

17 And then last thing and most important
18 of all, we have to be in compliance with
19 29-B. And I'll walk you through as to how we
20 got there in this most feasible plan.

21 This is for reference. The site is in
22 Lafourche Parish down here (indicating). As
23 you can see, that's in the coastal zone.
24 That little star up there is the approximate
25 location of the site within Lafourche Parish.

1 And that's going to be a critical point too.

2 As you know, it's a coastal zone. It's
3 got coastal use permit issues. So that was
4 accounted for in our most feasible plan.

5 This is an overview of the site.

6 Looking back, here's Raceland. I'm going to
7 show you where the site is. But the key
8 issue here I want you to take away is you can
9 see that the high elevations are along the
10 bayou where the towns and the agricultural
11 activity is occurring. As you get away, it
12 becomes more marsh and swamp. And that's
13 regionally. It's not specific to our site.

14 So here is our site.

15 Again, here's Raceland.

16 This is the approximate boundaries of
17 the property of interest in the litigation.
18 As Mr. Cash told you, we're taking a subset
19 of that, 220 acres, in our limited liability
20 admission.

21 Here's the 220 acres on which Hess had
22 historical operations. All of our AOIs fall
23 within here. This is also the area where
24 Hilcorp is currently operating, which I'll
25 show you.

1 BY MR. LAPEZE:

2 Q. Mr. Edwards, if you could stop there for one
3 minute.

4 I guess to the layman, when I'm looking at
5 this aerial, it looks like we've got solid land
6 throughout the scope of the aerial, including the
7 aerial that's -- the 220 acres depicted in the yellow
8 box.

9 Based on your site investigation, is that the
10 case? Are we talking about solid land out there?

11 A. And Mr. Gladstone fell -- Mr. Jones fell into
12 the trap that most people would see if they went out to
13 that site and looked at it briefly.

14 It does look like solid land. That's exactly
15 what a flotant zone marsh looks like. When you work in
16 it and you step on it, you'll find out there's water
17 underneath it.

18 Outside of the roads in this area, everything
19 is basically underwater --

20 Q. And so based on --

21 A. -- and we're going to show you that further
22 down.

23 Q. So based on the site investigation by you and
24 your team out there, we can't tell what the landscape
25 is simply based upon an aerial photograph, can we?

1 A. Absolutely not. There was over a year and a
2 half of investigations at this site and through
3 multiple seasons. And we're going to show you evidence
4 why that was a submerged wetland seasonally.

5 Q. And before we move on from this particular
6 slide, Mr. Edwards, the 220 acres that's depicted here,
7 Mr. Balhoff mentioned at the beginning of the hearing
8 where -- asking a question about where is that located.
9 That accurately depicts the 220 acres that Hess
10 operated there; is that correct?

11 A. That is correct. And we got this from a
12 metes and bounds survey, proof that using Tobin maps
13 and plats from DNR well files.

14 Q. And when you say "we," who did the work to
15 plot this particular acreage as it's shown on this
16 slide?

17 A. It was done by the GIS group with GHD in the
18 Baton Rouge office.

19 Q. And this accurately shows the location of the
20 220 acres in which Hess operated; is that correct?

21 A. That is correct.

22 Q. Okay.

23 A. And again, this is just to reiterate from the
24 Hilcorp testimony where the Hilcorp operations are.

25 And if you can use this road as a reference,

1 you can see it falls within the 220 acres that we
2 discussed on the previous slide.

3 Okay. Now we're going to talk about the
4 plaintiffs' investigations, and I'm going to
5 specifically address some of Mr. Jones' concerns about
6 delineation and show you the amount of data that was
7 taken from the site and the vast number of samples that
8 were generated and that were analyzed for.

9 As you can see from these pictures, the
10 equipment that's being used are airboats. Both sides
11 used airboats, and there was a reason both sides used
12 airboats, because that's the only way you can get into
13 the site outside of the roads that are elevated.

14 Here's the timeline of the numerous
15 investigations that occurred. And as I previously
16 stated, they occurred over about a year-and-a-half time
17 period.

18 GHD employees were on site for about a year
19 of that. Not only did the plaintiffs collect samples,
20 but we took split samples of that.

21 In addition, when it became our turn to do
22 the site investigation, we collected samples and
23 plaintiffs took samples. And I'm going to show you how
24 we used that vast universe of information to develop
25 this plan.

1 So here's the key data generated from the
2 plaintiffs' investigation, the initial investigation
3 conducted.

4 As you can see up here, over 300 samples of
5 locations -- or 300 samples were collected from the
6 site just during the plaintiffs' investigation. Those
7 samples were analyzed for hundreds of analytes.

8 In addition, the GHD personnel that were out
9 there during the spring and fall and winter thoroughly
10 confirmed that it was a submerged wetland. They were
11 having difficulty migrating through that terrain.

12 I'm going to show you some photos of the type
13 of equipment that the personnel working there had to
14 wear in order to safely operate.

15 THE HEARING OFFICER: Mr. Edwards and
16 Mr. Lapeze, we don't need to break right now.
17 It's at ten; but sometime within the next 15
18 minutes I want to take a midmorning break.
19 So you can control it. Just you know where
20 you're at.

21 MR. LAPEZE: Sure.

22 I'll tell you what, Frank, why don't we
23 get past this issue, and wherever you think
24 is a good breaking point.

25 THE WITNESS: Okay. This may be it, James.

1 Maybe pick up after here, because we get into
2 how we used that data to then subsequently
3 develop our assessment of the site, and then
4 we'll go into the characteristics of the site
5 that confirmed the applicable 29-B criteria
6 are the submitted criteria.

7 MR. JONES: Mr. Balhoff, before we break on
8 that point, can I offer an objection to any
9 testimony from Mr. Edwards with regard to
10 whether this is a submerged wetland or an
11 elevated wetland?

12 He has clear as a bell said that he did
13 not do the work. He is not a wetlands
14 site-characterization expert. Others in his
15 office or others on the expert team may have
16 done the work.

17 Under any scenario in a court of law, he
18 would not be allowed to render opinions with
19 regard to whether this site is a submerged or
20 an elevated wetland, given that testimony.

21 MR. LAPEZE: He can certainly go through and
22 describe for the panel -- again, this is for
23 the benefit of the panel -- the site
24 conditions, the observations that were made
25 by his team. And we're certainly prepared to

1 do that today, and that's what Mr. Edwards is
2 going to do.

3 THE HEARING OFFICER: I'm going to overrule
4 the objection.

5 His plan, as other plans that I've sat
6 and listened to, is often -- and is in this
7 case -- a compilation of various scientists.
8 He has said that people on his staff have
9 been involved in these issues. He has
10 testified that he has applied 29-B.

11 29-B, part of 29-B includes the
12 definitions, includes submerged wetland.

13 I think you made your point, you know,
14 in voir dire with the panel, and they
15 understood the point; but he's going to be
16 able to testify.

17 MR. LAPEZE: With that, Mr. Balhoff, this is
18 a good time to break.

19 THE HEARING OFFICER: Okay. 15 minutes. So
20 we'll be back at, say, 10:18.

21 (Brief recess taken.)

22 THE HEARING OFFICER: Okay. We're back on
23 the record.

24 Mr. Lapeze -- or Mr. Edwards.

25 BY MR. LAPEZE:

1 Q. Mr. Edwards, when we took a break, you were
2 explaining to the panel the steps that you used in
3 reviewing the data from the plaintiffs' investigation.

4 Can you just pick up where you left off
5 there, please.

6 A. Yes, I'll kind of summarize again where we
7 left off at.

8 There was over 300 samples collected during
9 the plaintiffs' investigation by both the plaintiffs
10 and the defense, and those samples were analyzed for
11 hundreds of analytes. And that was our starting point
12 for the subsequent investigations, and one of the
13 initial building blocks for the subsequent most
14 feasible plan that we're going to talk about in a
15 little bit.

16 In addition, I want to point out this photo.
17 This is a photo of AOI 5. And the old saying is, "A
18 picture speaks a thousand words." But in this case,
19 outside of showing that it's lush and beautiful, it
20 looks like land. If you go into there and work in it,
21 you'll soon find out that it sinks and that there's
22 water underneath it.

23 These are the sample locations that were
24 collected by the plaintiffs throughout the site.
25 That's in addition to 220 acres that we're going to

1 talk about in our most feasible plan, but I wanted to
2 show the panel the full breadth of the sample locations
3 that were taken by the plaintiffs. And a good majority
4 of those, there were split samples taken by GHD. In
5 some instances, there were not enough samples to split
6 and that's why there's a number differential between
7 the two.

8 Okay. Mr. Cash commented quickly in the
9 opening, but I want to go through it one more time for
10 you: The 29-B definitions of an upland area, you know
11 that.

12 You know about the elevated wetland area.

13 And again, as Mr. Cash pointed out, the key
14 point is, not only is it in submerged or inundated or
15 wet, but also that it has significant land mass in
16 order to do the closures. Submerged wetland has a very
17 similar definition except the land mass is not there
18 for the closure to occur.

19 And I'm going to show you data from the site
20 that supports the land mass is not there and that this
21 is a wetland, a submerged wetland.

22 We'll get into the submerged wetland
23 environment.

24 Here's some photos of the AOI. Subsequently
25 I will take you on a virtual tour, as Mr. Cash had

1 indicated, and show you that this is consistent
2 throughout the 220 acres that we talked about, outside
3 of the elevated roads that were manmade and the well
4 pads.

5 We'll start off here. This is photos of the
6 plaintiffs' experts. Notice the equipment that they
7 are in, very first sign: They are in an airboat.
8 Looks like land behind this, but they are in an
9 airboat.

10 Next site. Over here again, surrounding area
11 looks like land, but there's airboats out there
12 supporting them. You don't see anybody standing
13 outside of the airboats in those areas.

14 Q. And, Mr. Edwards, if you can describe, what's
15 underlying what looks to be a land mass there? What is
16 are you looking at?

17 A. This is the flotant marsh. Underneath there
18 is a going to be mud and water.

19 Q. And I also see there's some, maybe some swamp
20 grass that is laid down there. Is that the effects
21 from the airboats that are being driven around it?

22 A. Correct. And as you saw in our second slide,
23 one of our key factors was minimize damage to the
24 existing ecological system out there.

25 When both the plaintiffs and the defense

1 applied for their coastal use permits at the site, the
2 DNR said: You can only access it via airboat. You're
3 prohibited from using Marsh Masters, because of concern
4 of damage to this marsh.

5 Q. And even with that concern, there's still
6 some issues that we see in accessing these various site
7 using the airboats; correct?

8 A. That is correct.

9 Q. Okay.

10 A. We now move in, up to the northeastern
11 portion of the site, same marsh. This is what it looks
12 like. It's got to be land.

13 If you stand on it awhile, it turns into a
14 puddle of water, you sink.

15 Q. Mr. Edwards, I believe, if you could orient
16 the panel. Is this the location where -- we'll look at
17 it a little bit later -- where your AOI 1 is located?

18 A. That is correct. It's in that area.

19 The other thing I would like to point out to
20 you -- and I will do this throughout. At some point
21 I'll stop because I think you'll get the point.

22 But if you observe what this gentleman is
23 wearing -- it's one of the plaintiffs' experts -- he
24 has a life jacket on.

25 Okay. We're now moving toward the more

1 center side of the flotant marsh. You can see that the
2 marsh is being matted down by the airboats, but the
3 personnel are on the airboats.

4 Coming back in again more center part, this
5 is the, what the flotant looks after the airboats mash
6 down the grass, and that's where you see the water
7 there.

8 Now we're coming into AOI 2, the southern
9 portion of the site. I don't know if you can see from
10 where you're at, but this is water around here. This
11 big tree here, this is a cypress tree, right in the
12 middle of AOI 2. And that's some more pictures of it.

13 This -- I need to clarify that some of the
14 pictures were taken in the fall and some of the
15 pictures -- well, in the winter, and some were taken
16 during the spring. So when you see the color
17 difference in the vegetation, some are dormant during
18 the winter; some are in the early spring.

19 Q. And while some of the pictures were taken in
20 different seasons, based on your general site
21 observations, did the condition of the water, the
22 standing water, change while your team was out there?

23 A. Not significantly.

24 Again the crew was working in the northwest
25 portion of the site, working on the airboats. And

1 you'll see the water is coming up underneath the boat.
2 The marsh grass is mashed down.

3 This is a good example of elevation
4 difference between the manmade features at the site and
5 the surrounding environment. The only dry area you'll
6 find in that 220 acres is the manmade roads or the well
7 pads.

8 You can see the elevation grade between the
9 top of the road and the side of the road. This is
10 looking out into the center or into the flotant marsh
11 looking in. If you're standing on that road, you would
12 be looking out to the east, and you can see that
13 there's at least a two- to three-foot grade difference
14 between the two.

15 There's a reason they built those roads up,
16 you know, was to get to their equipment. They couldn't
17 get there any other way.

18 This is up in the northwest portion by the
19 tank battery. You see this gentleman has his boots on.
20 He's starting to sink. You can't see the bottom of his
21 foot as he's trying to collect the sample.

22 Q. And you can see, this is right off of the
23 tank battery there in the northwest part of the
24 property there; is that correct?

25 A. That is correct.

1 More samples down in the western central
2 portion of the site.

3 This is one of the plaintiffs' experts. We
4 actually had to drive a casing in the ground to keep
5 the water out before they take their soil samples, so
6 making a dry well because it's so wet.

7 And you can see these gentlemen walked out
8 here; and as they walked through there, the water
9 becomes exposed.

10 Now we're down in again further portion of
11 the west central portion, and guys are wearing boots.
12 They are ankle-deep in the water trying to collect
13 samples.

14 Q. And again, Mr. Edwards, this is the location
15 of one of the AOIs that we're going to be talking
16 about?

17 A. That's on the edge of AOI 5.

18 The purpose of this one is to show the high
19 ground is where the equipment is. The operators
20 intentionally elevated it out of the wetland areas in
21 order to keep it high and dry. So the wellhead is
22 here. As soon as you get off the manmade wellhead, the
23 topography drops and you're wet again within a few
24 feet.

25 Again you can see the gentleman standing in

1 the water collecting the sample.

2 This is over by the tank, I guess that's the
3 saltwater disposal system, shed or the presser station.
4 You can see the water there. In the background is the
5 field corp operational trailer. So you're looking out
6 into the flotant marsh.

7 More pictures showing that the water comes
8 right up against the equipment, therefore they had to
9 elevate it.

10 Same photo there.

11 Now we move further into the marsh and to the
12 east. Gentleman standing -- this one has freestanding
13 water with marsh grass around it as you come off the
14 equipment pads.

15 And here we're in the southwest portion of
16 the site, and you can see the gentleman has his boots
17 on, and the marsh grass is starting to mat down. You
18 can see some of the water.

19 Q. Mr. Edwards, one thing I do want to ask
20 about. We can see in the aerial photo itself -- not of
21 the photo of the gentlemen doing the work -- but there
22 appears to be some lines within the flotant marsh. Do
23 you see those?

24 A. Yes, sir. Right here? These things you're
25 referring to?

1 Q. Correct. What would cause those lines to
2 appear?

3 A. That's the airboats.

4 Location of the same. Now you can see the
5 water is opening up as they work in that area a little
6 more.

7 More in the center of the flotant here. You
8 can clearly see, as these airboats run, they mat down
9 that marsh grass, it becomes open water.

10 And then this is down in the southwestern
11 portion of the 220-acre tract. It's a little more
12 heavily vegetated, but still sitting in standing water,
13 in cypress trees.

14 Q. One thing to note here, Mr. Edwards: If we
15 simply look at the aerial photo, it looks to be a
16 wooded area; does it not?

17 A. It does.

18 Q. But when we get on the ground, we can clearly
19 see standing water. Is that right?

20 A. That is correct.

21 And again, on the southern side, same thing.
22 From the aerial, we can look here, and it looks like
23 it's a forested area. But you can see that it's
24 inundated in water when you get on the ground.

25 In addition to what we saw with our eyes, we

1 also look at the soil survey to see if it supported
2 that it was a wetland. As most of you know, the soil
3 types are critical in determining a wetland
4 environment.

5 The area of interest for this limited
6 admission has three primary soil types. There's an
7 Allemands muck, a Barbary muck, and the Schreiver clay.
8 The Schreiver clay just comes in in the southeastern
9 portion -- or southwestern portion.

10 This would be the Barbary muck and this is
11 the Allemands muck. The majority of the site was
12 Barbary.

13 Q. If you look at the characteristics of each of
14 those soil types: An Allemands muck very frequently
15 floods, very poorly drained. Zone of water saturation:
16 Zero inches during all months, zero inches is from land
17 surface, meaning water is at the land surface. It's
18 saturated.

19 Exact same requirement for a Barbary muck:
20 Frequently flooded, very poorly drained, zero inches
21 during all months. That's the land surface.

22 And then the Schreiver clay: Occasionally
23 flooded, still poorly drained, but still has zero
24 inches of water saturation. Comes all the way up to
25 the surface.

1 So all the soil types within the 220 acres
2 support that it is a submerged wetland.

3 Now we're going to go into what the
4 plaintiffs' expert says about the site as it existed.

5 Mr. Miller, in his ICON report, indicates
6 this area is in a semipermanent flooded floatant marsh.

7 CEI's expert report says that the property in
8 the Raceland oil and gas field generally exists in a
9 submerged landscape.

10 Q. And you agree with that statement,
11 Mr. Edwards?

12 A. I do.

13 In addition CEI collected three samples
14 within the 220 acres for their evaluation, and all
15 three samples encountered water at the surface and to
16 some depth. And as you can see, they are located
17 throughout the site.

18 And these are the logs from the CEI sampling.
19 Every one of them says: Water, water, water.

20 Again from CEI's expert report: "Aside from
21 the natural levee and the manmade roads, the vast
22 majority of Raceland's field is covered by floating
23 panaceum marsh, with a profile that includes emergent
24 vegetation, a living root mat, a dead peat mat, and a
25 layer of clear water."

1 So all of this is underlain by a layer of
2 water.

3 And with that information, GHD, in their most
4 feasible plan, elected to use the submerged wetland
5 criteria. We felt the science supported that it was a
6 submerged wetland criteria.

7 Now we're going to talk about how we
8 evaluated those hundreds of data points generated by
9 the plaintiffs' investigation.

10 The first things we did is we organized the
11 data by location horizontally and then by depth
12 vertically. We put that all together.

13 The next thing is we looked at what the dates
14 were. So if there were two data points from a given
15 location at a given depth, we used the most current
16 data point.

17 The next thing is, once we made a subset of
18 that universal database on these two criteria, we
19 identified the maximum concentration for any given
20 sample, whether it be the plaintiffs' sample or GHD's
21 sample, of that location at that depth.

22 And then the final thing is we took that
23 maximum location of that sample at that depth and
24 compared it to the 29-B submerged wetland criteria, and
25 that gave us our starting point of where potential OC

1 compliance issues existed at the site.

2 And for the purposes of my future
3 conversation, when we get into more of what these AOIs
4 were and how we developed them, as both parties had
5 indicated, there were eight AOIs within the 220 acres
6 that we were going to discuss in our most feasible
7 plan.

8 So we're going to start off with AOI 1 and
9 show you the process that we used with the analytical
10 data, and also demonstrate how we did delineate it, and
11 why what we're confident that this most feasible plan
12 has the full delineation in it.

13 This is AOI 1. This is the plaintiffs'
14 sample. They ran it for this suite of parameters.

15 We took the maximum concentration of each one
16 of those parameters, excluding the salt parameter
17 because it's a submerged wetland, and determined that
18 oil and grease and true total barium needed further
19 evaluation. They exceeded 29-B for that sample.

20 We did the same thing for AOI 2. Again, the
21 plaintiffs took one sample, ran this through the
22 parameters. We did our analysis against 29-B submerged
23 wetland criteria and determined that AOI 2 true total
24 barium is the constituent of concern.

25 Same with AOI 3, one sample, ran it for that

1 suite, determined that oil and gas was the constituent
2 of concern that exceeded OC 29-B.

3 On AOI 4 they ran two samples, one of which
4 they ran for this complete suite and determined that
5 true total barium was the exceedance of 29-B, and it
6 was at this sample here (indicating).

7 AOI 5, they ran two samples, one or more for
8 this suite of parameters, and determined that oil and
9 grease exceeded 29-B criteria; or we determined that
10 oil and grease exceeded 29-B criteria. Oil and grease
11 exceeded at both locations.

12 And finally AOI 6, ran these suite of
13 parameters -- the plaintiffs ran these suite of
14 parameters. Oil and grease was determined to exceed
15 29-B according to GHD's evaluations, and it was this
16 sample here (indicating).

17 AOI 7 also ran 29-B parameters. As you can
18 see down there, they ran -- one or more of the three
19 plaintiffs' planned sample locations there. But the
20 only thing the plaintiffs determined or the only thing
21 the plaintiffs' data indicated was that radium-226 and
22 -228 were a problem; that the rest were 29-B compliant.

23 Same with AOI 8, the plaintiffs collected
24 three samples from that area, analyzed one or more of
25 those samples to that suite; and the evaluation of the

1 data indicated only radium-226 and -228 at AOI 8
2 warranted further evaluation.

3 Now, that was the starting point of where GHD
4 then subsequently did our investigation to delineate
5 the impact, and we'll talk about that.

6 So we started off inside -- I've now reduced
7 it to just the sample locations inside the 220 acres
8 that we're going to discuss today. So they took all
9 those data points, analyzed them. We took split
10 samples, analyzed them. We identified eight AOIs that
11 had one or two constituents that exceeded per each AOI
12 and developed a sampling plan.

13 Now, our delineation plan was based on the
14 constituent of concern. So if oil and grease exceeded,
15 we delineated for oil and grease; if true total barium
16 exceeded, we delineated true total barium; or if they
17 both exceeded, we did both.

18 I'm going to -- some of this is just a
19 summary of what I went through verbally. We took all
20 that data. The green dots are the sample locations
21 where there were no 29-B exceedances. The yellow dots
22 were the sample locations where they had one or more
23 parameters that exceeded 29-B. So before we started
24 our investigation, those were the areas that we focused
25 on.

1 We then came in and did some more sampling,
2 fairly extensive. And I'm going to go through each one
3 AOI by AOI; but the yellow squares are the GHD sample
4 locations.

5 So we'll start off at AOI 1. Do you remember
6 I told you, the plaintiffs took one sample out of this
7 AOI, and it failed for -- or it had an issue with 29-B
8 compliance for oil and grease and true total barium.

9 GHD came in and took those samples for oil
10 and grease and true total barium. We delineated their,
11 the plaintiffs' analytical data and came up with this
12 polygon as to where potential future evaluation was
13 warranted.

14 The ones outside the polygon are samples that
15 are compliant with 29-B, the ones inside the polygon
16 are samples that exceeded 29-B parameters; and that was
17 for oil and grease and true total barium.

18 See more photos of it. Again, if you look at
19 this one, it looks like a piece of land. The photo on
20 the left is the one I want to spend a few minutes on.
21 We're going to talk about passive closure for AOI 1,
22 and this is one of the primary drivers where I'm
23 touting passive closure.

24 That is actually a canal. And the way you
25 access AOI 1 is right up here. And in order for us to

1 get our equipment in there to mitigate AOI 1, we would
2 have to go through almost a mile of this and destroy
3 it.

4 Location of AOI 1. Again, it looks like dry
5 land, but you can see the picture was taken from an
6 airboat.

7 AOI 2. Plaintiffs took one sample right
8 here; but through here, the historical levees, this was
9 a surface impoundment, and the yellow line is the
10 historical levee dimension.

11 These are the samples in -- the yellow
12 squares are the samples that GHD took to delineate this
13 one point, and that was for true total barium.

14 Q. Mr. Edwards, let me ask you. Plaintiff
15 taking one sample location, would there be a credible
16 way to try to delineate this area for any constituent
17 by taking a single sample?

18 A. No, not in my experience.

19 Q. And the panel is obviously very familiar with
20 this: That's the reason that you had to go back behind
21 the scenes at that point taken by the plaintiffs and
22 take more?

23 A. That's correct.

24 Q. And you did that for all of the AOI?

25 A. That's correct.

1 And in our most feasible plan, we're going to
2 even do more overkill and assume that we're taking more
3 samples to validate, confirm what we did here.

4 Based on this data, we drew a polygon of
5 where the potential concerns are for true total barium.
6 Everything outside of this white line complied with
7 29-B. Everything inside of that white line didn't.
8 And as you can see, we have data points in all
9 directions to make that polygon.

10 You may ask about this one, but that's the
11 levee. We're using the physical levee boundary in that
12 direction. And here's some photographs of it.

13 The reason we proposed -- primary reason we
14 proposed AOI 2 passive closure was one of the
15 landowners' complaint was cypress trees. In the middle
16 of AOI 2 are cypress trees growing. We would have to
17 kill them in order to get in there and address that
18 true total barium.

19 AOI 3. Samples took one -- or plaintiffs
20 took one sample within that AOI, the yellow squares
21 were GHD's sample to delineate it. We drew our
22 polygon.

23 And I haven't really focused on the little
24 box in the right-hand corner; but all AOIs together
25 combined are less than three acres. So it's a very

1 surgical small action that we are proposing in order to
2 protect that marsh, very much similar to what Mr. Cash
3 said in his opening statements.

4 That's a picture of it. One would think you,
5 well, have a lot of trees there. It must be relatively
6 high. And that is correct, that's a spoil bank on the
7 canal that's immediately behind it.

8 AOI 4. Took two samples out there. SP1 was
9 the one that was problematic. We took only one sample
10 ourself there, and this is for a true total barium hit.
11 The sample we took there was for x-ray diffraction to
12 show that was barite, and it did confirm that.

13 And you say what about delineation? Well,
14 this was an old well pad, so we had a clear -- in our
15 plan, we're just having to take out the whole well pad.

16 This is a photograph of AOI 4, and the
17 gentleman is standing on land because that is an
18 elevated well pad that they put around it in order to
19 get out of the marsh. But if you look immediately
20 behind it, you see the marsh grass of the flotant.

21 This is AOI 5. They had oil and grease hits.
22 The plaintiffs took two. GHD took the samples to
23 delineate. Based on that we developed this polygon.
24 And this is another good example of what, that a
25 picture can be deceiving. So one may ask, well, you

1 have no sample points in this direction because the
2 yellow line stops here and the yellow line stops here.
3 This is a canal that runs like this and is filled with
4 flotant, and we use the physical boundary of the canal
5 as our boundary in those two directions.

6 You can see the airboat pathway. Once they
7 ran through it, it opened water up, and here's some
8 photos of it.

9 AOI 6, this was the sample that exceeded 29-B
10 for oil and grease. We came in and delineated it.

11 And if you're inquiring about in this
12 direction, the yellow line, this is a road. Again we
13 used the elevated road as a boundary in that direction.

14 And that's photographs of AOI 6. That's
15 looking right out in the flotant marsh. From the road,
16 if you had never seen flotant marsh before, it looks
17 just like land.

18 AOI 7, three points by the plaintiffs.
19 Dr. Frazier came in and did some additional points. In
20 addition to the soil sample he did a NORM survey, which
21 he will discuss, and generated this polygon.

22 Q. Mr. Edwards, in terms of AOI 7, just to make
23 sure the panel is clear -- I think you just mentioned
24 that we're going to hear from Dr. Frazier about this --
25 the constituent of concern here is radium?

1 A. That's correct, they did have some samples
2 for 29-B by the plaintiffs, and they did not require --
3 and they all passed 29-B criteria.

4 AOI 8, the plaintiffs collected three
5 samples. Dr. Frazier came in and did some additional
6 soil sampling, as well as his NORM survey, and he will
7 discuss that in more detail, and generated two polygons
8 for remediation of that AOI.

9 Q. Mr. Edwards, same issue here on AOI 8 that is
10 on AOI 7: There is a sample point that was taken by
11 the plaintiffs that ran the full suite of parameters of
12 29-B; correct?

13 A. They ran a significant amount of 29-B
14 parameters. I don't know if it was complete, but yes,
15 and did not have any 29-B exceedances.

16 Q. Okay. So in terms of what you went back --
17 and Dr. Frazier, I should say, went back and delineated
18 for, it was simply for radium based on the screening
19 out of any 29-B parameters that was done by GHD?

20 A. That's correct. And we have some pictures of
21 that area.

22 Now, we discussed earlier some of the
23 criteria for the consideration in our most feasible
24 plan, and we'll take this moment before we actually get
25 into the details of the plan to go through that one

1 more time. And we added one here that ultimately led
2 to the addendum that you got.

3 And that was -- first of all, we want to
4 comply with 29-B. We want to be protective of human
5 health and the environment. We want to minimize
6 disturbance to the environmental site setting. We want
7 to have the ability to implement without significant
8 disruption to the existing operator who has oil and gas
9 operations ongoing. And the last one, we wanted to
10 have the ability to obtain the necessary permits, in
11 particular coastal use permit and the corps permit.

12 When you evaluate in that particular aspect
13 of it, my project team made it clear to me that the
14 corp of engineers and/or the DNR would want to evaluate
15 alternate routes to the site before they would issue a
16 permit. And we had only looked at water access to AOI
17 5 and 7.

18 So one of the things that changed in the
19 addendum is we determined that we were going to modify
20 our egress and access to those two AOIs and do it by
21 land, and get rid of the water side, so we would not
22 have to destroy those flotant marshes filled with -- or
23 those canals filled with flotant marsh.

24 Under 29-B they give you various options to
25 close a site. One is land treatment. The other is

1 burial and trenching, solidification, passive closure,
2 removal, and offsite disposal. As part of the
3 feasibility study conducted by GHD, we looked at all
4 five of these.

5 Land treatment -- there was no land mass to
6 do land treatment on, so we eliminated that.

7 Solidification, the bottom of the solidified
8 cell has to be five feet above the water table -- not
9 going to happen at this site. Given the soil survey,
10 everything is at the surface.

11 Same thing with burial and trenches, not
12 going to happen, burial of five feet above the water
13 table.

14 So those three were eliminated. That left us
15 with passive closure and with removal and offsite
16 disposal.

17 Q. Mr. Edwards, if I could ask you about land
18 treatment. You mentioned the lack of land mass to be
19 able to do land treatment on the site; is that correct?

20 A. That's correct.

21 Q. And as we saw, that's one of the criteria to
22 determine whether we're dealing with an elevated
23 wetland or a submerged wetland; right?

24 A. Correct.

25 Q. And typically, in your experience, land

1 treatment, is that a cheaper option to try to mitigate
2 a site, as opposed to removal and offsite disposal?

3 A. The larger the volume, yes. When you get
4 into smaller volumes, it may not be.

5 Q. Okay. So, if we have large volumes of soil
6 that need to be removed, land treatment would be
7 cheaper. But even though that may be the case, based
8 upon your evaluation of the lack of land mass, as we'll
9 see, the two options that you chose were either passive
10 closure our removal and offsite disposal?

11 A. Right. In addition, aside from the obvious,
12 true total barium was not really indicative to land
13 treatment. So there was a chemical reason not to do it
14 as well.

15 Okay. So now we get into our most feasible
16 plan that we have before you today.

17 As you recall, I went through how we
18 developed a delineation polygon. We've confident we
19 have it delineated.

20 There was some subsequent, in I think it was
21 July of this year, the agency asked for more
22 information as to why certain parameters were not
23 included, outside of the coc's that we addressed in our
24 delineation.

25 We responded with answers as to why we didn't

1 do it, but we didn't respond with an answer that we
2 were going to do it.

3 In that addendum we agreed that we were going
4 to do it. And that addendum is to give you the
5 complete set of 29-B parameters that you're seeking in
6 order to confirm to you that this is delineated
7 correctly. And I'm going to show you where those
8 sample locations are.

9 So now this one AOI that's a 10th of an
10 acre, we have a myriad of samples taken out of there in
11 order to verify and confirm that that is the correct
12 polygon for that site.

13 These are the pre-excavation samples that
14 we're proposing to do to give you that complete list,
15 so that you can comfortably use that in establishing
16 what is the most feasible plan.

17 Again, that's some of the issues that we went
18 into for the passive closure. The access is very
19 restrictive; you can't get there, you can't get any
20 equipment in there without destroying the marsh.

21 And we wanted it to be protective of human
22 health and the environment as well. And we'll talk a
23 little bit about that with the data.

24 AOI 2, yellow line again is the outline of
25 the levees. That's the initial data from both entities

1 at the site assessments. The white line is the
2 delineation for true total barium.

3 We're confident that white line is correct.
4 But since the agency asked for a complete set of 29-B
5 data, we want to go back there and sample it even more
6 and give you that data to show that you can confidently
7 agree that we confirmed that white line.

8 Passive closure was recommended here for all
9 of these issues; but the main one is that it was
10 evident from the landowners' lawsuit that they wanted
11 cypress trees on the site, and this AOI had cypress
12 trees growing in it. And I can't get the true total
13 barium out without killing the cypress trees.

14 This is a traffic route for the AOIs that we
15 will do active remediation. The black line with the
16 arrows is how the equipment will come by land in each
17 AOI in order to get it out.

18 Remember AOI 1 and 2 are in the most feasible
19 plan passive closure, so we don't propose to go there.

20 Q. Mr. Edwards, this is the route of access and
21 egress for mitigation of soil as it is proposed in the
22 addendum; correct?

23 A. Correct. That's a good point.

24 Yes, for AOI 5, this is a canal right here.
25 We would move, bring the equipment up that canal.

1 Same with AOI 7, this is a canal that goes to
2 the north. Originally we had proposed to access those
3 two AOIs through that canal. We determined that
4 obtaining those type of permits would be very
5 difficult, so we just overcame it by going by land.

6 And one my ask, Well, if you have roads
7 there, why didn't you do that the first time?

8 One, this AOI is pretty big, and to reach it
9 with the equipment from the land side would create some
10 new problems. We've engineered a solution to get
11 around that.

12 The second, on AOI 7, is the road is blocked
13 by an above-ground pipeline, and we engineered a
14 solution to get around that. If you want some details
15 on that, we can talk about it.

16 Here's some pictures of how we'd access it,
17 some typical type of equipment that we could use. This
18 would be a surgical dig-and-haul at this AOI, AOI 3,
19 and it would be done to remove the oil and grease.

20 We have the pre-excavation confirmation
21 samples and we also propose in the addendum to do
22 post-excavation samples to give even more data, that we
23 got what we said we were going to get.

24 Again AOI 4, pre-excavation samples. All of
25 these AOIs have post-excavation samples as well.

1 AOI 5, some typical type of equipment getting
2 in there and accessing it.

3 AOI 5, because we changed the route, we do
4 have to account for current operations. Current
5 operations has a pipeline running there, and that's
6 their office trailer.

7 The current most feasible plan would relocate
8 that office trailer and reroute that pipeline in order
9 that we could get full access to that pit.

10 Q. And in terms of rerouting the pipeline,
11 Mr. Edwards, would that interrupt the current oil and
12 gas operations?

13 A. It would have minimal disruption when it's
14 done. That's a pretty typical activity when you're
15 doing maintenance on pipelines. It's not that
16 difficult to set up temporary lines and reroute them.

17 Q. How would you go about doing that?

18 A. What we would do is move it over to the east
19 side of the road and get it out of the way, and then
20 reconnect further south to the west side of the road.

21 And that's the pre-excavation sampling for
22 the full suite of 29-B. And this would have
23 post-excavation confirmation sampling for that same
24 full suite.

25 AOI 6, access that one from the road.

1 Sequentially you would prefer to do AOI 6 first before
2 you move the pipeline to the west side of the road
3 because then you have the same problems. So you do AOI
4 6 first and then AOI 5.

5 The post or pre-excavation sampling for the
6 full 29-B constituents.

7 AOI 7, as I talked to you earlier about,
8 there was a pipeline crossing the road, and that's why
9 we initially tried to get to it by water. If you
10 notice, the equipment here is a lot smaller. We're
11 proposing to lift the equipment over the above-ground
12 pipeline and then track down the road to get to the
13 AOI.

14 AOI 8, same as the NORM remediation, and that
15 would be some of the equipment used out there.

16 As Mr. Cash said in his opening statement,
17 one of our key objectives was to protect the
18 environment. We have some actual dig-and-haul
19 activities proposed in our most feasible plan, and we
20 would to do that surgically so that we minimize the
21 impacts to that lush marsh out there, and that's what
22 we're trying to do.

23 AOI 5 has a fair amount of volume in it.
24 Combined, it's a little over 3000 cubic yards. And as
25 I said previously, the aerial dimension of it is a

1 little under three acres for all of the eight AOIs.

2 Now the cost: About \$2.9 million to
3 implement the most feasible plan that we have in front
4 of you today.

5 Timeline: It would take approximately three
6 months once the appropriate permits are obtained, which
7 we can't predict. That's a function of how long the
8 agency takes to get them out to us; but approximately
9 three months once the appropriate permits are obtained.

10 And we started off with some key factors to
11 consider, and we believe we have met each and every one
12 of those. We believe that the site setting is
13 submerged wetland. We believe in minimizing
14 unnecessary damage to that submerged wetland. We
15 believe we've taken into account the existing
16 operations in trying to control and service the plan.
17 And we believe we have a 29-B compliant plan.

18 MR. LAPEZE: Okay. With that, Mr. Balhoff, I
19 think we're done -- I believe we're done with
20 Mr. Edwards.

21 THE HEARING OFFICER: Mr. Jones?

22 Why don't you sit in the witness chair.

23 Mr. Jones?

24 MR. JONES: Thank you.

25 CROSS EXAMINATION

1 BY MR. JONES:

2 Q. Good morning, Mr. Edwards.

3 A. Good morning, sir.

4 Q. We had an opportunity to meet on a number of
5 different occasions. Nice to see you again.

6 Let me, let me first start by asking you
7 whether or not you would agree that this property is in
8 the Louisiana coastal zone?

9 A. Yes.

10 Q. Has been since 2012, since the amendments
11 from the original 1980? Is that about right?

12 A. I didn't research that, but I'll take your
13 word for it. But we had to get coastal use permits in
14 order to do the investigation.

15 THE COURT REPORTER: I'm sorry. I can't see
16 you.

17 THE WITNESS: Is it better if I use this?

18 THE COURT REPORTER: Yes. I'm sorry.

19 THE HEARING OFFICER: Are you all set?

20 Is that mic on? Okay. That's fine.

21 BY MR. JONES:

22 Q. Okay. All right. So I think we were talking
23 about, it was about 2012 when the amendments to the
24 area covered by the coastal zone that this property
25 would have become inside of that definition, the

1 location of the coastal zone; is that correct?

2 A. Like I said, Mr. Jones, I didn't research
3 that, but I'll take your word for it.

4 Q. That was going to be my next point.

5 You didn't look at what the rules are with
6 regard to the coastal zone and whether this property is
7 a part of that, is a part of that geographical area?

8 A. No, sir. When we did our site investigation,
9 we did have to get a coastal use permit, so I did look
10 into that.

11 Q. Okay. But you would agree that this site
12 that we're talking about is a mineral exploration and
13 production site, the 220 acres that has now limited,
14 made its limited admission report. Correct?

15 A. That's one activity that's occurring on
16 there.

17 Q. Yeah. I mean, are you aware of any other,
18 any other activities other than mineral exploration and
19 production site on this particular property?

20 A. It's also used for recreational activity, so
21 hunting.

22 Q. Hunting?

23 A. Yes, sir.

24 Q. Hunting or fishing or other items like that.
25 But in terms of industrial use, you would

1 have to agree that --

2 Is this me making this noise.

3 (Discussion off the record.)

4 BY MR. JONES:

5 Q. All right. Now that we've established that.

6 Okay. All right.

7 Okay. My point, and you would agree with me,
8 that based upon your investigation here, that the only
9 industrial activity out there that you're aware of is
10 mineral exploration and production sites; correct?

11 A. On the property itself?

12 Q. On the 220 acres pursuant to which Hess
13 admitted to.

14 A. To my knowledge, that's all I'm aware of.

15 Q. Okay. And you're aware of -- in general
16 you're aware of the coastal zone regulations; right?

17 A. I am.

18 Q. You're aware of rule 43, 719(M)?

19 A. I don't have it memorized.

20 Q. Let's work through it: Mineral exploration
21 and production sites shall be cleared, revegetated,
22 detoxified, and otherwise restored as near as
23 practicable to their original condition.

24 Are you familiar with that?

25 A. Can I see that please? Can I see it in

1 context?

2 THE HEARING OFFICER: Just are you familiar
3 with it?

4 BY MR. JONES:

5 Q. I'm asking him. You talked about all the
6 coastal, you know, the work you've done in 29-B and
7 cleansing these pits. I'm sure the panel knows what
8 the rule is.

9 Are you familiar with what that rule is?

10 A. I'm not familiar that that applies to an
11 active oil and gas site.

12 Q. You're not aware of it?

13 A. For an active site.

14 Q. Well, are all these areas that you're talking
15 about cleaning up in AOI 1 through 8, are they all
16 active sites?

17 A. According to the Hilcorp testimony, it
18 matches well with the 220 acres.

19 Q. Well, if we go and take a look at the picture
20 of AOI 1. Do you remember AOI 1?

21 A. Yes, sir.

22 Q. Is that an active site?

23 A. It's not at this time, but the area of
24 operation is in Hilcorp's active operation.

25 Q. Just answer my question. I mean, AOI 2, is

1 that an active site right now?

2 A. It has a well pad next to it.

3 Q. Is it an active well pad?

4 A. I didn't look at that, Mr. Jones. I don't
5 know if that's active at this time. To my knowledge
6 it's not, but I ...

7 Q. Okay. At the end of the day, you didn't take
8 into consideration with regard to this property 719(M)
9 of the Louisiana Coastal Zone Regulations; is that
10 correct?

11 A. I took into account that the 220 acres was
12 within an active operation.

13 MR. JONES: Sir -- and Mr. Balhoff, I just
14 need answers to my question.

15 Q. What I'm asking is, is it your evaluation in
16 all of the work that you've done over the last two
17 years, did you at all take into consideration Coastal
18 Zone Regulation 719(M)?

19 A. I took into account that the site needed a
20 coastal use permit; and if that encompasses it, then
21 yes.

22 Q. Well, now, 719(M) says: Mineral exploration
23 and production sites shall be cleaned, revegetated,
24 detoxified and otherwise restored as near as
25 practicable to their original condition upon

1 termination of operations. Okay?

2 A. To answer your question, I need to see the
3 full context of that regulation.

4 Q. Maybe we can do that.

5 Did you see the full context of that
6 regulation when you were doing any work on this site?

7 A. I did not.

8 Q. Okay.

9 Let's take a look at some of these.

10 MR. LAPEZE: And I'm sorry, Glad. I need to
11 put on the record an objection.

12 To the extent that they are trying to
13 imply that the Coastal Zone Regulations,
14 Administrative Code 43-I-17-M and the
15 restoration standards apply to any
16 restoration that's going to be done in
17 conjunction with this limited admission, we
18 would certainly vehemently object to that.

19 THE HEARING OFFICER: This is
20 cross-examination. I'm going to overrule
21 that objection.

22 MR. JONES: While she is pulling that up,
23 we're going to go back to the paper copies.

24 THE WITNESS: Mr. Balhoff, I lost my glasses.
25 I don't know what I did with them.

1 MR. JONES: You may need those.

2 THE WITNESS: I definitely will need those.

3 THE HEARING OFFICER: I know the feeling. I
4 lost mine this morning.

5 MR. JONES: Can you use reading glass? What
6 power?

7 THE WITNESS: 1.5.

8 MR. JONES: I can help you out.

9 THE WITNESS: Let's see. One other pocket
10 that I didn't look in.

11 Here they are. Here they are. Thank
12 you, sir. I got them.

13 MR. JONES: Are you sure it's not 2.0?

14 THE WITNESS: Maybe.

15 BY MR. JONES:

16 Q. Okay. All right. Let's go. Let's go to
17 some photographs in our board here.

18 You recognize, Mr. Edwards, this 1941
19 close-up aerial; correct?

20 A. Yes, sir.

21 Q. And this outlines the area of the operations
22 that we have been talking about today; is that right?

23 A. It doesn't have the 220 acres outlined on it.

24 Q. All right. Well, let's go to the, let's go
25 to the next one.

1 Does that look familiar to you? This is the
2 January 10, 1941 aerial photograph.

3 A. That's what it says, yes, sir.

4 Q. All right. If we take our red dot and we go
5 through all this area right here, in your investigation
6 you walked around all of this area; correct?

7 A. I had people in that area, yes, sir, or I saw
8 it from the road. I personally didn't walk in it.

9 Q. You've personally only been out to this
10 property twice; is that right?

11 A. That is correct, but I had people out there
12 for almost a year.

13 Q. Just asking about you. You yourself were out
14 there twice; right?

15 A. That is correct.

16 Q. And you yourself didn't take any of those
17 photographs that we showed earlier during your
18 presentation; correct?

19 A. That is correct.

20 Q. You had people take those photographs; right?

21 A. Yes. The GHD staff that were on the site for
22 almost a year took those photos, as well as your
23 experts.

24 Q. All right. Now, but you know enough to know,
25 sir, that this stand of timber right here that I'm

1 circling -- on the left-hand side of this canal, on the
2 right-hand side of this canal, this area right in
3 here -- you know enough to know that it doesn't look
4 like it did on January 10, 1941 as it does today in
5 2015, does it?

6 A. Can you show both photos?

7 Q. I asked you a question and then I'm going to
8 show the next photo.

9 Would you agree with me that that timber
10 right there, in that area, based upon your observation
11 and being out there on that property, is largely no
12 longer there?

13 A. You're asking me if the timber is largely no
14 longer there?

15 Q. Yeah, I am.

16 A. There is a reduction in the timber, yes.

17 Q. Yeah. Would you consider it a significant
18 reduction in the timber on this property?

19 A. I don't know the acreage. I didn't calculate
20 that.

21 Q. Okay. Have you seen this 1953 photograph?

22 A. I have seen it, yes, sir.

23 Q. Do you notice any change in the timber on
24 this particular, on this particular photograph?

25 MR. LAPEZE: Mr. Balhoff, I'm going to object

1 on the basis of relevance.

2 This isn't a case about timber. It's a
3 limited admission. It's not about dealing
4 with timber. It's about dealing with 29-B
5 constituents. I'm not sure what Mr. Jones --
6 THE HEARING OFFICER: I'm going to overrule
7 the objection for reasons I've already stated
8 this morning.

9 The issue with respect to relevance in
10 this area, I'm going to be very liberal on it
11 because this is a point of contention. I've
12 said this morning that I'm not suggesting
13 that Hess is not one hundred percent correct
14 that this is irrelevant. Okay? But I'm
15 going to allow the testimony. I'm going to
16 allow the panel to hear the testimony.

17 Go ahead.

18 MR. JONES: Believe me, we're not going to
19 belabor this, Mr. Balhoff. We're going to
20 get through this. But it's important that we
21 walk through these years.

22 BY MR. JONES:

23 Q. April of 1953, do you notice any reduction --
24 this is the type of investigation that you do,
25 Mr. Edwards, correct, to look at properties and figure

1 out how to characterize them properly? You look at
2 aerial photographs, and you've been to this particular
3 site; correct?

4 A. I have been to that site, yes, sir.

5 Q. Okay. Would you agree that, from 1941 to
6 1953, there's a noticeable difference in terms of the
7 timber right around the operations of Hess on the
8 property?

9 A. I don't know if I would agree with that.
10 Could you point which specifically ones you're
11 referring to?

12 Q. Well, right -- follow my red dot here.

13 A. Okay.

14 Q. Right in this area right here, would you
15 agree that compared to what we see here in 1941, there
16 has been a loss of a considerable amount of timber on
17 the property, right in the vicinity of the operation?

18 A. I don't see a significant loss. You have got
19 one -- the '41 is zoomed in. The '53 is zoomed out.

20 Q. Okay. Well, would you agree that, if we went
21 out there right now today and we looked at the stand of
22 timber there next to the operations of Hess that there
23 is a marked difference in the stand of timber between
24 1941 and what's out there today?

25 A. And where would that be? Could you point it

1 out?

2 Q. Yeah. I'm talking about 1941 through 1953
3 through today, would you agree, based upon your own
4 personal observations and being out there on the
5 property, that there is a big difference in the timber
6 that was standing and existing in 1941 and what is out
7 there today?

8 A. It has been reduced.

9 Q. All right. Hold on one second.

10 If you'll take a look at photo 6 in your
11 packet. Starting out the same way here.

12 Do you all have that before you, the
13 photograph number 6?

14 Now, you can agree with me, would you not,
15 Mr. Edwards, that by November 29, 1973, there was a
16 large loss of this, whatever, the timber that was
17 standing there in 1941 which was just three years after
18 Hess began its operations. Correct?

19 A. It has thinned out. But again, it's a
20 different scale, so it's hard to see over time.

21 Q. Is that how you would characterize that, as
22 thinning out?

23 A. Yes.

24 Q. Okay. Now, if we go -- for some reason
25 that's not working.

1 If we go to, if we go to I guess what's
2 number 7.

3 A. I don't see 7.

4 Q. Yeah, this one.

5 A. Is that 2010?

6 Q. Yes, I'm going to the 2010. It may be hard
7 for the panelists to see because they don't have
8 numbers on it here.

9 Yes, it is, it's number 8. I'm sorry about
10 that. Do you see number 8 down there?

11 This is the 2010; correct?

12 A. I see a 2010 photo, yes, sir.

13 Q. So if we put 2010 by, from right next to --
14 excuse me -- 1941, would you agree with me, based upon
15 any reasonable environmental site assessment, there has
16 been a dramatic impact of the oil and gas operations on
17 this timber stand?

18 A. I can't agree to the last statement. I don't
19 know what the causation is for the timber reduction,
20 but the timber has declined.

21 Q. Right. Since 1941?

22 A. Correct.

23 Q. And that timber includes cypress trees;
24 correct?

25 A. Correct.

1 Q. Okay. Now, you are well aware, you would
2 agree with me that, if we take a look at page 9 -- do
3 you see page 9?

4 A. I'm not seeing page numbers.

5 MR. CAMPBELL: It's on the lower right-hand
6 side.

7 THE WITNESS: Okay. It's where the --

8 BY MR. JONES:

9 Q. Uh-huh. Right.

10 Now, this is a, this is a photograph that I
11 presented to you recently; correct?

12 A. Yes, sir, during one of my depositions.

13 MR. LAPEZE: Glad --

14 If I could, Mr. Balhoff, this is I
15 believe what the plaintiffs gave us this
16 morning as Exhibit 66. This wasn't on their
17 exhibit list. And based upon your prior
18 ruling about documents not being on an
19 exhibit list, we make objection to the use of
20 this.

21 MR. JONES: It was on our exhibit list. It
22 was taken as a result of the deposition of
23 the addendum that they submitted. It was
24 attached to his deposition. And we -- and I
25 mean, we submitted it as part of the whole

1 process.

2 MR. LAPEZE: It was submitted, Mr. Balhoff,
3 as a catch-all. And I believe you made a
4 ruling that you wouldn't accept catch-alls.

5 MR. JONES: And it was attached to our
6 pretrial brief which was filed before the
7 exhibit list.

8 THE HEARING OFFICER: It is attached to the
9 pretrial brief. All of these are connected
10 to the pretrial brief. It was used in a
11 pretrial brief.

12 I know the ruling I made, but because
13 this isn't a surprise, it was in the pretrial
14 brief -- I don't know anything about the
15 deposition that we're talking about connected
16 with the addendum.

17 This is cross-examination. I'm going to
18 allow you to use it.

19 BY MR. JONES:

20 Q. So you're familiar with this particular
21 picture and the red line around it; correct?

22 A. Yes, sir. That's something you asked me to
23 draw during my second deposition.

24 Q. Right. And that second deposition just
25 happened -- just so everybody has got the right

1 context -- just a couple of weeks ago; right?

2 A. Yes, sir.

3 Q. And this was a result of the addendum that
4 you-all submitted to the panelists around
5 October 23rd; correct?

6 A. That was the questions you were asking me.

7 Q. Yeah, and we were taking that deposition.

8 Now you would agree with me -- and just so
9 we're perfectly clear with the panel -- that it is your
10 opinion that all of these photographs that you showed
11 them a few minutes ago in your presentation at these
12 AOIs that showed this inundated or submerged wetland
13 areas, that those areas are inundated and submerged
14 because of Hess' activities on this property. Correct?

15 A. No, that's not solely due to Hess' activity.

16 Q. I didn't ask you whether it was solely due.

17 I said, you would agree with me that Hess
18 contributed to the inundation or any submerged wetlands
19 in the areas of these AOIs; correct?

20 A. I didn't say "submerged wetlands."

21 You asked me during the deposition to draw
22 you the area that's inundated by manmade features. And
23 my recollection of my testimony was it was a
24 combination of the canals that existed there before
25 Hess, the spoil banks that were created by those

1 canals, and the roads that were created for the oil and
2 gas activity.

3 Q. Okay. So breaking that down is that we would
4 have an agreement that these impounded this area that
5 is outlined by this red pen writing. That's your
6 writing; correct?

7 A. That is, yes, sir.

8 Q. Right. And it is your opinion and you drew
9 that to demonstrate to me that inside of that area you
10 believed that there are a couple of reasons that that
11 area is impounded; correct?

12 A. That is correct.

13 Q. And one of those reasons is Hess' oil and gas
14 operations on the property. There may be others, but
15 that's one of them?

16 A. The elevated roads are above the surrounding
17 marsh, are impounding the water.

18 Q. Are impounding the water; and importantly,
19 impounding the water inside of this area that you drew.
20 Correct?

21 A. Correct, along with the spoil banks that were
22 there before Hess ever operated.

23 Q. Now, historically, historically, you have no
24 opinion as to whether this property before that
25 inundation was a submerged wetland or an elevated

1 wetland. Correct?

2 A. No, sir. All I can tell you is that the
3 historical aerals showed canals were there.

4 Q. You don't have an opinion. You're not going
5 to represent to the panel that, before these roads or
6 before these canals, this is an inundated area,
7 correct, or a submerged area?

8 A. No. My testimony would be related to what
9 was in the historical aerals, and the canals existed
10 before the E&P operations. Then that's what I would
11 testify.

12 Q. Okay. And you would, you would testify that
13 these particular areas at this particular time are
14 submerged, but you don't know what they were
15 historically; right?

16 A. That is correct.

17 Q. All right. And you would also agree with me
18 that all of the AOIs that you presented to the panel
19 this morning are contained in your impounded area that
20 we're referring to here on Exhibit 9; correct?

21 A. No. Clarify that. That they are in the
22 submerged wetlands, but some of the roads are -- like
23 AOI 3 and AOI 2, the roads are to the north of the
24 impounded area. There's submerged wetlands on either
25 side of the roads.

1 Q. Okay. But all of the AOIs that you're
2 proposing for the most feasible plan are inside of this
3 submerged wetland area in your opinion; correct?

4 A. No, three of them, looks like three of them
5 are out.

6 Q. Okay. Three of them are outside of the
7 submerged wetland?

8 A. Are outside of the impounded area by the
9 roads, not the submerged wetlands. There's submerged
10 wetlands on both sides of the roads.

11 Q. Okay. So it's a correct statement that your
12 opinion is, is that all the six AOIs are in the
13 submerged wetlands that you're proposing on behalf of
14 Hess to remediate?

15 A. All eight are in submerged wetlands, yes,
16 sir.

17 Q. All right. And that -- okay.
18 Let's go to number 10, page 10.

19 A. Yes, sir.

20 Q. This outlines the various, the various AOIs
21 that you were discussing in your testimony this
22 morning; correct?

23 A. It does.

24 Q. All right. Let's go up to AOI 1, which is
25 going to be page 11.

1 Is this the right, correct location for AOI
2 1, where I've got the arrow there?

3 A. Yes, sir.

4 Q. Okay. And what we have here are some -- we
5 have data on this, on page 11 that talks about the
6 contaminants that your plan proposes to leave on the
7 property; correct?

8 A. Yeah. As I described in the presentation,
9 the passive closure would leave oil and grease and true
10 total barium.

11 Q. Yeah. Well, at a high level. You would
12 agree that your passive closure request would leave
13 constituents and contaminants on the property that
14 exceed 29-B; correct?

15 A. Yes, sir, that's the purpose of the passive
16 closure, to show that it does more harm getting it out
17 than to just leave that little residual in the 10th
18 of an acre at that AOI.

19 Q. You recognized in your original report in
20 July of 2015 that Hess has not secured an Affidavit of
21 Permission from the Landowner; correct?

22 A. That is my understanding. But I don't deem
23 that to be necessary because the passive closure
24 requirements allow the commissioner to waive any of
25 those conditions.

1 Q. Well, I didn't ask you that question.

2 Just as far as you are aware, there is no
3 such affidavit from the landowner; correct?

4 A. I'm not aware of any affidavit from the
5 landowner.

6 Q. Okay. All right.

7 So let's tell the panel what exactly Hess
8 proposes to leave at AOI 1 in terms of contaminants
9 over and above the 29-B standards.

10 Can you tell what contaminants those are
11 going to be?

12 A. Yes. It'll be 3.78 weight percent oil and
13 grease, and 254,000 ppm of -- or 254, yeah, 254,000 --
14 it says units on this -- ppm of true total barium,
15 which is barite.

16 Q. Okay. Anything else that Hess is proposing
17 to leave on this property, at this particular site?

18 A. Not according to our 29-B-compliant plan.

19 Q. Okay. Well, what about at 2147? Is that
20 3.99 percent oil and grease at zero to two feet?

21 A. I'm sorry. Ask that again.

22 Q. Yeah.

23 A. Okay. I was reading the maximum
24 concentrations.

25 Q. You said 3.78 percent oil and grease.

1 A. 3.99, 3.3, yes, in those sample locations.

2 Q. Those sample locations inside of AOI 1;
3 correct?

4 A. That's correct, which is a 10th of an acre.

5 Q. What about TPH-D?

6 A. Not a 29-B parameter.

7 Q. Okay. Did you use RECAP to look at the
8 TPH-D?

9 A. I personally didn't. But Dr. Millner
10 evaluated it and determined it to be protective of
11 human health.

12 Q. What about TPH-O?

13 A. Again, not a 29-B compliant parameter.

14 Dr. Millner did evaluate it and determined it
15 to be protective of human health.

16 Q. Okay. Let's go to the next one, AOI 2, which
17 is --

18 AOI 2. All right. This is the right
19 location for AOI 2?

20 This is what you propose -- this is what Hess
21 proposes to leave on the landowner's site; correct?

22 A. Yes, sir.

23 Q. You have SD1, SD2. Those are sample
24 locations; is that right?

25 A. That is correct.

1 Q. Hess proposes to leave TPH-D on the property?

2 A. Those are not 29-B compliant parameters. And
3 Dr. Millner evaluated it and determined it to be
4 protective of human health and environment.

5 Q. Let's just be clear for the panel what Hess
6 proposes now to leave on the property in exceedance of
7 either 29-B or RECAP.

8 A. Hess -- I'm sorry.

9 Q. I'm sorry. Go ahead.

10 A. I was going to say, Hess' plan is 29-B
11 compliant. Passive closure is a 29-B compliant closure
12 process, as long as you delineate the lateral and
13 vertical extent of the 29-B parameters.

14 We have done that in our plan, and that's
15 what we're proposing to leave.

16 Q. We're going to get into that. But let's see
17 if we can answer my questions first.

18 Hess proposes to leave at AOI 2: TPH-D,
19 TPH-O and true total barium on the property. Correct?

20 A. The true total barium is the only 29-B
21 compliant parameter, and that is barite.

22 And there is cypress trees growing in AOI 2,
23 which is why we proposed passive closure.

24 Q. Okay. Let's move to 13.

25 You're familiar with Section 313, Pit Closure

1 Techniques and On-Site Disposal of E&P Waste?

2 A. Yes, sir.

3 Q. You're familiar with rule 2(E)?

4 A. 2(E)?

5 Q. Yes. Start with 2: Operators requesting --
6 operators requesting passive pit closure shall submit
7 the following. Right?

8 A. Yes, sir.

9 Q. And (E) is an Affidavit of No Objection from
10 the Landowner Endorsing the Operator's Request for
11 Passive Pit Closure. Correct?

12 A. That is what it says, but you left out number
13 3.

14 Q. Well --

15 A. Which says the office -- the Commissioner of
16 the Office of Conservation can waive any of these
17 requirements.

18 Q. Okay. That's what you're asking them to do?

19 A. I'm asking them to consider the environment
20 and consider a passive closure.

21 Ultimately it's their decision, but I'm
22 giving them the science as to why I think it should be
23 passively closed.

24 Q. Okay. let's go to 14.

25 Now you're familiar with this list of rules;

1 correct?

2 This is what Hess is obligated to follow in
3 terms of rules once it makes a decision to admit or
4 make a limited admission; correct?

5 A. That is correct.

6 Q. All right. And this was on page 3 of your
7 July 14 report, so you're obviously familiar with this;
8 correct?

9 A. Yes, sir.

10 Q. All right. And Section 611(B) says, "Each
11 plan shall fully delineate the vertical and horizontal
12 extent of the environmental damage." Correct?

13 A. That's what it says, yes, sir.

14 Q. All right. Do you believe that you've done
15 that in this case?

16 A. Absolutely. The environmental damage is
17 defined by the parameters that exceeded 29-B. That's
18 exactly what our delineation did.

19 Q. Do you believe you did that in your July,
20 July 2015 report?

21 A. That was the response to the agency?

22 Q. No, no, that was your original most feasible
23 plan that you submitted.

24 A. Yes, sir. Yeah.

25 Q. Okay. All right. There was an addendum that

1 came back, that you issued in October of -- just a
2 month or so ago. Correct?

3 A. That is correct.

4 Q. And that proposed, that addendum proposed
5 about a hundred, 120 or so additional samples in
6 addition to those you proposed in the July report;
7 correct?

8 A. Approximately, yes, sir.

9 Q. I'm not trying to hold you to that number.
10 But approximately 120 or so samples; right?

11 A. Yes, sir.

12 Q. At the various AOIs?

13 A. Yes, sir.

14 Q. Right. And that was all because of the
15 effort to satisfy what we just talked about in 14,
16 which is on the board there, 611(B), which is to fully
17 delineate the vertical and horizontal extent of the
18 contamination. Correct?

19 A. No, sir. That is consistent with the expert
20 report and the original plan to do confirmation
21 sampling as part of the mitigation activities.

22 Q. Oh. Well, those additional 120 samples were
23 going to be pre-excavation samples; correct?

24 A. That is correct.

25 Again, as we pointed out in our presentation,

1 one of our key objectives was to minimize damage to
2 that marsh. And we didn't want to bring in equipment
3 into areas we didn't necessarily have to access. So
4 we're going in and confirming that volume before we
5 bring that equipment in there.

6 And it's also related to what the agency
7 asked for this past summer and the additional
8 information from that. And as I discussed with you
9 during my deposition, it became more evident to me in a
10 meeting on September 9 with Stephen and with Jamie on a
11 totally different case that their expectations for the
12 full suite of parameters to be analyzed was beyond what
13 I initially anticipated.

14 We did delineate the contaminants that were
15 greater than 29-B, which is the environmental damage.
16 We did that.

17 Now we're going in and giving the agency the
18 full suite of parameters that they seek in order to
19 have their data in their file for their closures.

20 Q. Now, in the way that that worked in your July
21 report was that, if the plaintiffs, for example, in any
22 of the AOI areas were later to find had an oil and gas
23 hit that exceeded, you would go in and you tested for
24 oil and grease. You didn't do the whole suite.
25 Correct?

1 A. As I explained in the presentation, we took
2 the maximum, most current volume -- value, and if that
3 exceeded 29-B, that was our delineation criteria.

4 Q. And now what you're proposing, pursuant to
5 the addendum, is to go out and do the whole suite of
6 29-B testing in those areas of interest?

7 A. In the area that we already have defined,
8 delineated, we're going in, doing the confirmation
9 samples, which was in the expert report, which was in
10 the plan. Now we're just getting the agency the
11 details based on our latter understanding of what their
12 expectations were.

13 Q. You don't have those sample data back today;
14 correct?

15 A. That is correct.

16 Q. You're not going to have them next week;
17 correct?

18 A. That is correct.

19 Q. You're not going to have them six weeks from
20 now; correct?

21 A. Depends on what the agency does with this
22 plan and when it's implemented.

23 Q. All right. You have no idea, you don't know
24 what the exact results of that sampling are going to
25 be. Correct?

1 A. No, sir. I'm confident that we have our
2 polygons delineated.

3 I'm confident that, based on the analytes
4 that the plaintiffs ran and the split samples that we
5 ran, that we have that data, that area -- each AOI
6 fully delineated. We're now just getting some
7 confirmation sampling that the agency requested.

8 Q. I'm not asking if you're confident. I'm
9 asking whether you know what the sample results are
10 going to be.

11 As a matter of science, do you know what
12 those sample results are going to be?

13 A. Nobody can know until you run them.

14 Q. Nobody could know -- I'm sorry, what did you
15 say?

16 A. I said no one could know until you run them.

17 Q. Right. And the purpose for you running them
18 is to satisfy this 611(B) that's right here on this
19 piece of paper; correct?

20 A. Absolutely not. We felt we satisfied that in
21 the first plan.

22 The purpose of me running it was the basis of
23 the communications I had on September 9 with Stephen
24 and Jamie based on another case.

25 Q. Okay. Well, what we can agree on is, is that

1 now as a result of the October addendum, what Hess has
2 proposed to do is to take approximately 120 new samples
3 for new parameters in these new AOIs. Correct?

4 A. We are able to take some confirmation
5 sampling from those AOIs, approximately 120, yes, sir.

6 Q. Okay. All right.

7 A. And we're taken post-confirmation samples as
8 well on top of that.

9 Q. Let's go to, let's go to the next one.

10 Skip over that one.

11 Skip over that one.

12 You can skip over that one.

13 All right. Let's go to this particular site,
14 AOI 3.

15 Do you have that before you?

16 A. Yes, sir. Yes, sir.

17 Q. Okay. How big of an area is this?

18 A. It says a 10th of an acre.

19 Q. Okay. How many -- let's see.

20 What are you sampling for here?

21 A. This was oil and grease, if I'm not mistaken.

22 Q. Okay. And now you're proposing to do a full
23 sweep of the 29-B parameters; is that correct?

24 A. Yes, sir.

25 Q. All right. And to date there has not been,

1 other than oil and grease, a test at this particular
2 site; correct?

3 A. I would have to look at the date. I'm not
4 confident -- I'm not sure of that.

5 We had a slide that had it before it was
6 analyzed on the bottom of it.

7 Q. Hold on one second.

8 All right. So what you're proposing at AOI 3
9 and 4 is that, with regard to AOI, you're going to take
10 a minimum of 12 samples; is that correct?

11 A. That's discrete samples that would
12 subsequently be composited into one interior and one
13 perimeter and two-foot intervals.

14 Q. Okay. If we go to -- does that apply to
15 areas number 3 and 4?

16 A. Yeah. Those are -- what you're showing is
17 discrete sample locations. And the ones on the
18 interior will be composited and the ones on the
19 perimeter would be composited.

20 Q. Now, you just mentioned just a moment ago
21 that you're going to do a composite sample.

22 What authorizes you to take composite samples
23 when you're exercising a -- when you're trying to
24 figure out the delineation of the extent of the
25 contamination?

1 A. We already had it delineated. We're showing
2 compliance with 29-B.

3 Q. Showing compliance with 29-B?

4 A. Yes, sir.

5 Q. So none of these extra samples that you're
6 going to be taking pre-excavation have anything to do
7 with delineating the extent of the full suite of the
8 29-B parameters; is that correct?

9 A. Yes, that is correct. That's showing
10 compliance with our mitigation approach.

11 Q. All right. But you would agree that all
12 these samples are going to be taken before any
13 excavation is done? And I'm talking all these 120 new
14 proposed in your amendment.

15 A. In addition to the post-excavation samples,
16 yes, sir.

17 Q. Okay. And what if this data comes back and
18 says, we have more oil and grease in some of these
19 extra samples, for example at AOI 3 or 4 we're talking
20 about?

21 A. We have data that would indicate that's not
22 the case. That's a hypothetical scenario.

23 But if that hypothetical scenario came back,
24 we would address it.

25 Q. Yeah. Well, all right.

1 So you would agree with me that your October
2 report was to continue to delineate the constituents on
3 the property; right? I mean, we're not having a
4 problem about that, are we?

5 A. Which report? October?

6 Q. October 23, 2015, the addendum.

7 A. No, sir. No, sir. We're saying that's
8 confirmation sampling to confirm the effectiveness of
9 the mitigation in each AOI. We're confident we have it
10 delineated.

11 Q. Well, let me present to you this document
12 that you wrote to the Department of Natural Resources
13 on October 23, 2015.

14 A. Okay.

15 Q. Is that your cover letter?

16 A. It is.

17 Q. Says GHD. That's you?

18 A. Yes, sir.

19 Q. Submits this addendum to provide for the
20 collection of additional analytical data to confirm
21 delineation of constituents. Correct?

22 A. And compliance. It's a confirmation
23 sampling.

24 Q. Did you say "confirm delineation"?

25 A. It says to "confirm delineation and

1 compliance." That is to confirm the full suite of 29-B
2 compliance.

3 Q. All right. So your position is that none of
4 this has anything to do with Chapter 6, correct,
5 chapter 6 of delineating the constituents on the
6 property at the AOIs?

7 A. My, my position is that we've complied with
8 Chapter 6 with the data we have to date, the hundreds
9 of data points, the hundreds of analytes that we've
10 collected from this site. As I demonstrated in the
11 PowerPoint how we delineated each AOI, I feel we
12 complied with that.

13 Q. All right. Well, let's take a look at AOI 5
14 and 6. Let's go to -- you're proposing to take a
15 minimum of 39 and 18 samples?

16 A. That's discrete. They will be composited.

17 Q. Okay. You're going to take discrete samples
18 and then you're going to composite them, and then
19 you're going to -- and those are pre-excavation
20 samples?

21 A. Those are pre-excavation samples, yes, sir.

22 Q. And then you're going to make a decision
23 based upon those discrete samples and compositing them
24 as to whether or not you have successfully confirmed
25 the delineation of the property, of the site?

1 A. The current plan is we'll dig up that area
2 outlined, remove it in off-site disposal, take samples
3 of the underlying soil and confirm that we laterally
4 have completed our mitigation, and then that will be
5 the purpose of that.

6 Q. Okay.

7 A. So the samples that are here outside of the
8 vertical ones at the last depth will be removed. We're
9 digging that out. Those samples will be gone.

10 Q. Those samples will be gone?

11 A. Right.

12 Q. Well, what happens if you go and take these
13 additional at Areas 5 and 6, and you go out and take
14 some of these 39 or 18 samples and you test for oil and
15 grease, and one of them in the discrete sample results
16 comes back and exceeds the 29-B, what are you going to
17 do?

18 A. Again, I don't believe that will happen
19 because --

20 Q. I'm not asking you what you believe is going
21 to happen. I'm asking you as an expert. Please, I
22 want you to bear with me for a second on this. It's an
23 important question.

24 If you go and take these additional samples
25 that you proposed in your addendum and it turns out

1 that any one of those constituents or suite of metals
2 or materials in 29-B are exceeded, what are you going
3 to do?

4 A. We will address it.

5 The data that we took from that site to
6 delineate does not indicate that's the case. We have
7 the data that shows that oil and grease is not that
8 extensive.

9 Q. All right. Let's go to AOI 1 and 2. You
10 propose to take at least 12 or 36 samples from there;
11 correct?

12 A. You said 1 and 2?

13 Q. Yeah. We're back to the ones that you want
14 to passively close; correct?

15 A. Okay.

16 Q. AOI 1 and 2?

17 A. Is there a map you have in this package of
18 that?

19 Okay, there it is. I'm sorry.

20 Q. Before I get to AOI 1 and 2, let me ask you
21 about this composite sampling.

22 It's your -- what is the authority for you to
23 take a composite sampling before the Department of
24 Natural Resources to delineate or confirm your
25 delineation?

1 A. It's been the historical practice that the
2 agency has allowed since I've been in the business.

3 Q. Okay. Would you agree with me, is that true
4 for delineating the extent of contamination? Can you
5 take composite sampling?

6 A. You can, but we didn't do that.

7 Q. Okay. But you would agree there are no land
8 treatment cells on this particular property; correct?

9 A. We don't propose any land treatment, that's
10 correct.

11 Q. I moved around here one moment.

12 Just bear with me one second.

13 As a part of this overall --

14 As part of this proposal, the most feasible
15 plan that Hess has submitted to the Department, you or
16 certain experts have relied on RECAP; correct?

17 A. In our most feasible plan?

18 Q. Yes.

19 A. No, the most feasible plan is 29-B compliant.

20 Q. Have any of the experts that you've worked
21 with relied upon any standards from RECAP?

22 A. For the litigation purposes.

23 Q. Okay. So with regard to, with regard to what
24 has been submitted to this panel, there has been no
25 consideration of RECAP whatsoever?

1 A. The plan is 29-B compliant. It's not
2 intended to be -- to address RECAP.

3 Q. Okay. All right. You know that when -- you
4 know that RECAP provides that, when you're trying to
5 delineate the extent of contamination, discrete samples
6 should be taken? You're aware of that?

7 A. Yes, sir, that's what RECAP says. That's the
8 DEQ, not the DNR.

9 Q. With regard to AOIs 7 and 8, I think we have
10 an agreement that if you have -- there is radiation
11 that has been detected at those particular AOIs?

12 A. It's my understanding from Dr. Frazier's
13 report that they have some NORM issues at those two
14 AOIs.

15 Q. And you're not proposing on behalf of Hess to
16 take any, take a full suite of 29-B testing in that
17 area?

18 A. That is correct.

19 Q. And why is that?

20 A. We didn't fail -- we didn't have any
21 constituents of concern from the initial 300-plus data
22 points that it showed an exceedance.

23 Q. Well, with regard to AOIs 3, or 1 through 6,
24 you didn't have any exceedances of many of the
25 different parameters set forth in 29-B; right?

1 A. That's correct. That dataset was large
2 enough that it showed only certain coc's, mainly oil
3 and grease and true total barium.

4 Q. So do you -- have you had an opportunity to
5 look at the salt delineation, the delineation of the
6 salt contamination on this property?

7 A. As far as Mr. Miller's or ICON's --

8 Q. ICON.

9 A. -- proposed polygons?

10 Q. Uh-huh.

11 A. I have seen Mr. Miller's ICON polygons for
12 EC.

13 Q. And Hess took samples in those areas as well;
14 correct?

15 A. We did take samples, our own, as well as
16 split samples with ICON.

17 Q. Would you agree with me that the sample
18 results with regard to the salt in the ICON areas that
19 they have identified are generally similar in terms of
20 the concentration?

21 There's no real dispute over whether or not
22 the property is contaminated with salt at levels,
23 depending upon the submerged versus elevated analysis,
24 that exceed certain 29-B parameters. Correct?

25 A. If you're referring to sample A and the split

1 sample, sample B, the same order of magnitude, or are
2 you referring to do we believe that 29-B and the
3 submerged wetland encompasses salt?

4 I'm not sure I'm following what you're
5 asking.

6 Q. The former.

7 A. The former? In the submerged wetland, we do
8 not believe 29-B encompasses salt for submerged
9 wetland.

10 Q. Okay. All right. Would you agree that your
11 sample results turned up salt contamination on the
12 property?

13 A. No, we don't -- salt is a nonfactor in this
14 29-B compliant plan.

15 Q. All right. So salt -- so Hess does not
16 propose to remediate any of the areas where salt
17 exceeded any 29-B parameters; is that correct?

18 A. It didn't exceed because it was not
19 applicable.

20 But the answer is, because there's no
21 exceedances and it's not applicable, we're not
22 addressing it.

23 Q. Okay. Hess has made no effort to delineate
24 the extent of the salt contamination on the property;
25 is that correct? Any salt contamination on the

1 property?

2 A. Hess has not done -- we have not done any
3 delineation of any nonapplicable 29-B parameter.

4 Q. Okay. Well, if this panel were to find that
5 some parts or all of this 220 acres is an elevated
6 wetland, then you would agree with me that Hess has not
7 done or performed to date any type of delineation of
8 those areas; correct?

9 A. The panel would then instruct us, if they
10 needed more additional information, to get it, yes.

11 Q. Right. Have you ever seen a delineation of
12 an elevated versus submerged wetland performed?

13 A. Yes, I've done it before.

14 Q. Have you done it in this case?

15 A. I'm sorry?

16 Q. Have you done it in this case?

17 A. Assuming that the land form is two different
18 things?

19 Q. I'm just asking you a simple question.

20 You said you've done it before. Have you
21 done it in this case? Have you delineated --

22 A. Yes, I've done the delineation for a
23 submerged wetland. Yes, sir.

24 Q. I've gone through your report, in the July
25 report, and I've gone through your October addendum,

1 and I'll represent to you I have not seen any type of
2 delineation exercise in your report on elevated versus
3 submerged.

4 A. You don't compare them. You pick the land
5 form that it is. And it's a submerged wetland. And I
6 showed you in my presentation our delineation.

7 Q. I'm asking: In your reports, in your most
8 feasible plan, do you have a delineation establishing
9 that this is submerged wetland?

10 A. I'm not sure I'm following the question.
11 Did I do a wetland delineation? Is that what
12 you're asking?

13 Q. Yes. Did you do that?

14 A. No, sir. Neither party did.

15 Q. Well, you would agree that once Hess
16 admitted, it had an obligation to go out and do certain
17 delineation. The landowner doesn't have that
18 obligation in this context that we're in here today;
19 correct?

20 A. I think that's a legal question; but I can
21 tell you that both parties agree the current condition
22 is -- in their expert reports, both concur that it's a
23 submerged wetland.

24 THE HEARING OFFICER: We're going to break in
25 five minutes, so just keep that in mind.

1 MR. JONES: This actually would be a very
2 good -- because I'm about to switch over to
3 another topic. Is that okay if we do that
4 now?

5 THE HEARING OFFICER: That's okay with me.
6 We'll come back at five minute to one.

7 Off the record.

8 (Luncheon recess taken.)

9 * * *

10 THE HEARING OFFICER: Okay. We are back on
11 the record. We have a new court reporter
12 this afternoon, Mrs. Donna Chandler. So they
13 are going to be rotating. In other words,
14 Mrs. Champion will be here in the morning;
15 Mrs. Chandler will be here in the afternoon.

16 Okay. Back on the record.

17 We're on cross-examination. Mr. Jones,
18 proceed.

19 MR. JONES: Sure. Thank you.

20 CROSS EXAMINATION (CONTINUING)

21 BY MR. JONES:

22 Q. Mr. Edwards, you are familiar with what
23 you're calling your AOI 5; correct?

24 A. Yes, sir.

25 Q. All right. That's 29P092 there?

1 A. That's the LDNR pit file number for that
2 area, yes.

3 Q. And that is your AOI 5; correct?

4 A. The -- where the red triangle is in proximity
5 to where the -- not the yellow line.

6 Q. Yeah. The red triangle?

7 A. Yes.

8 Q. Seems close by. Yeah, the red.

9 All right. You have seen this production pit
10 inspection report from the Department's personnel?

11 A. I have.

12 Q. And you've, you've obviously seen where it
13 asked in Section C, "Site-Made Copy," is this an upland
14 or a wetland. They checked -- that particular
15 inspector checked "wetland"?

16 A. Uh-huh. Right, sir.

17 Q. And then it asks whether it was elevated or
18 submerged. What did that particular inspector check?

19 A. That particular inspector on that day checked
20 "elevated," but as I showed you in my presentation,
21 it's not fair for that inspector to go out there and
22 look at that submerged marsh, a one-day event. And it
23 looks to a person like it's solid land until you work
24 on it, and then you see that there's actual water
25 underneath it.

1 Q. Well, do you know how many times that
2 inspector had been to that property?

3 A. I'm looking at the date. He's there one day
4 max is what he claims.

5 Q. Well, you don't know whether he had been
6 there on other days -- he or she had been there on
7 other days; correct?

8 A. That report, on that particular, it says it
9 was that day and he -- he or she indicated that it was
10 elevated.

11 Q. Well, in any event, your position is that
12 this inspector got it wrong; correct?

13 A. My, my position is that it's unfair to judge
14 a one-time visit to that site, and it's the same for
15 that inspector, that that person could have gotten it
16 wrong. It's not their fault.

17 Q. Okay.

18 A. It looks like it's solid land until you work
19 in it.

20 Q. All right. Well, let's, let's talk a little
21 bit about AOI 5. You recognize that was a pit that was
22 cleaned up in 1990; correct?

23 A. That is my understanding, yes, sir.

24 Q. And you've looked at that pit file, and you
25 understand that Hess went to the Department and

1 recommended -- and suggested that that pit had been
2 cleaned up within 29-B parameters; correct?

3 A. It's my understanding that Hess did submit a
4 pit closure request.

5 Q. Right.

6 All right. Now, you would agree with me
7 that, based on the samplings taken in this matter over
8 the course of the last couple of years, that those
9 samples all demonstrate that, in fact, that pit was not
10 closed in compliance with 29-B back in 1990; correct?

11 A. That pit still had some residual oil and
12 grease --

13 Q. Well, based upon your assessment, could you
14 tell the panel how that pit was closed in 1990,
15 sampling was taken, right, to confirm that it was in
16 fact closed pursuant to 29-B standard, and then in
17 2013, '14, and '15, sampling is taken to show that it's
18 out of compliance. How did that happen?

19 A. I don't have an explanation for that. The
20 data speaks for itself. The data indicates that
21 there's oil and grease there today above the 29-B
22 sampling.

23 THE COURT REPORTER: Sir, I'm sorry. Could
24 you speak a little bit away from the mic.

25 THE WITNESS: Okay.

1 THE COURT REPORTER: Thank you.

2 I'm sorry, "the data indicates..."

3 A. The data indicates that there's oil and
4 grease at several locations in there above the 29-B
5 standards.

6 BY MR. JONES

7 Q. Well, it does -- you can see that it does
8 indicate that despite the backfilling of this exact
9 area that you're proposing to backfill back in 1990,
10 this area was not successfully closed, this pit;
11 correct?

12 A. Yeah. We're proposing to remove it.

13 Q. Well, do you know if they removed it in 1990?

14 A. I don't recall that level of detail.

15 Q. You're unaware that in 1990 the Department of
16 Natural Resources' pit file shows that they put in
17 clean dirt, thousands of -- thousands of yards of clean
18 dirt?

19 A. I'm just saying I can't remember that level
20 of detail right at this moment. If I saw a closure
21 report, I --

22 Q. Well, out of the 150 closures that you've
23 done, how is -- how many have you seen that have
24 reported to the Department of Natural Resources that
25 they were successfully closed and then 15 to 20 years

1 later you went back and did sampling to find out that,
2 in fact, they were not closed?

3 A. There's some.

4 Q. How many would you say?

5 A. I would say most of that occurred during my
6 Gulf experience in the early '80s where we were trying
7 solidification and -- solidification and bio -- we also
8 tried biodegradation. Those two didn't work very
9 effectively.

10 Q. Okay. So over the last 30 years, since you
11 were doing that with the Gulf in the last -- in the
12 '80s, have you seen that happen, where you close a pit
13 in the '90s and in 2000, around 2010, '11, '12, '13, it
14 turns out that that pit was not, in fact, closed
15 correctly?

16 A. It is periodic. It's rare.

17 Q. Really rare; right?

18 A. I wouldn't say really rare, but it's
19 periodic.

20 Q. Well, when's the last time you saw that
21 happen?

22 A. Apparently at this site.

23 Q. Well, thank you. Before this one.

24 A. I would say that was probably maybe something
25 in the Lapeze Field, which would have been around 2012.

1 Q. Uh-huh. Okay.

2 So you have been -- you have been out to
3 AOI 5, right?

4 A. Correct.

5 Q. And you acknowledge that this AOI 5 area was
6 a former pit; correct? Emergency pit?

7 A. It was a former E&P production area, yes,
8 sir, pit.

9 Q. So it's your understanding that Hess built
10 the pit in a submerged wetland?

11 A. That Hess built the pit in a submerged
12 wetland?

13 Q. Yeah.

14 A. I don't know when the pit was built.

15 Q. You know it was a pit, though; correct?

16 A. It's my understanding that it was a -- an E&P
17 pit, yes.

18 Q. Right. And you don't know whether Hess built
19 this in a submerged wetland or not?

20 A. Not at this time, I don't know that. I would
21 need to look at that.

22 Q. Have you seen Hess build in submerged
23 wetlands before?

24 A. Yes, sir.

25 Q. Okay. Let's take a look at some of these --

1 these photographs. We showed a few of your
2 photographs. Let's walk through AOI 5.

3 A. Yes, sir.

4 Q. Go to the next one, please.

5 Oh, we're going to switch over to AO 1 and
6 then go through AO 1 through AO 4.

7 Did you go out to the AO 1 site? And there's
8 a camera -- there's a screen right behind you, if
9 you're having a hard time seeing.

10 A. I drove by it in an airboat. I didn't get
11 out of the boat. I was actually sitting in the airboat
12 while they were sampling material.

13 Q. Okay. Does that look like AO 1 to you?

14 A. The bottom left-hand picture does.

15 Q. Well, sir, they're all from your -- you're
16 GHD; correct?

17 A. Uh-huh.

18 Q. They're all -- those are all your
19 photographs, right?

20 A. Uh-huh. Yes, sir.

21 Q. Now, you were out there on the property
22 twice; correct?

23 A. That's correct.

24 Q. So let me just ask you simply: Does this
25 look familiar to you?

1 A. And I'm --

2 Q. AO 1?

3 A. I was out there during the winter, so the
4 grass on the lower left-hand side would have been brown
5 -- dormant. But that's what it looked -- that's what I
6 recall it looking like. But I don't -- in the picture.

7 Q. Not like the top left-hand corner?

8 A. Yeah, that's correct.

9 Q. All right. Let's go to AOI 2.

10 All right. Did you go out to AOI 2 --

11 A. I did.

12 Q. -- and walk around that area?

13 Is that a fair and accurate reflection of
14 what AOI 2 looked like when you were out there?

15 A. Yes, sir. I think that's actually two
16 cypress trees in the upper right-hand corner that we
17 may have photographed as well.

18 Q. These are, again, GHD reliance photographs?

19 A. Yes, if you say so. I don't have the
20 photographs memorized, but if that's where you got them
21 from, I don't doubt you.

22 Q. Are you -- is it your position that you can't
23 walk through this area? It's not firm enough to uphold
24 a man?

25 A. No. I never said that. It's my position

1 this is a submerged wetland in this area.

2 Q. Okay.

3 A. That is an impounded area. It has a levee
4 around it. It holds water.

5 Q. Can you see that levee a little bit right in
6 the back in the top right-hand corner, just in the
7 distance? Can you see the outline of the levee there?

8 A. Top right-hand corner? I don't --

9 Q. Look at the one right next to you.

10 A. I don't -- Mr. Jones, but I'm -- I don't
11 believe I see it.

12 Q. All right.

13 A. But my eyes aren't that good --

14 Q. Mine aren't either.

15 Do you need your glasses?

16 Is this -- this was a former pit area, too;
17 correct?

18 A. It had the remnants of a former pit, yes,
19 sir. It had the levee. It was impounding water.

20 Q. All right. Well, let's go to AOI 3.

21 Are you familiar with that area?

22 A. Yes, sir. That's what it --

23 Q. Is that what AOI 3 looked like that
24 you recall?

25 A. That is correct. And you see the trees in

1 the back that's strewn on the spoil banks of the canal.

2 Q. You see the tire tracks right there in the
3 bottom corner?

4 A. That's correct.

5 Q. Looks like you can drive back there.

6 A. That's an airboat in the middle left-hand
7 portion. That's the bow of the airboat.

8 THE HEARING OFFICER: Mr. Pennington has a
9 question for the witness.

10 MR. JONES: Yes, sir.

11 MR. PENNINGTON: Is that -- is the May 15,
12 2015, is that the date of the photograph?

13 MR. JONES: I think it's the day we received
14 it.

15 MR. PENNINGTON: Oh, okay.

16 MR. JONES: I think we received it. I think
17 these photographs -- Mr. Edwards can correct
18 me -- I think they were predominantly taken
19 in 2013 and '14.

20 THE WITNESS: Yeah. There was three --
21 basically three months, if I'm not mistaken,
22 January -- or maybe December and January and
23 March.

24 BY MR. JONES:

25 Q. Okay. All right. Let's go to AOI 4.

1 A. Yes, sir.

2 Q. Is that -- is that you?

3 A. No, sir, that's not me.

4 Q. Okay. Is that what you recall AOI 4 looking
5 like in that, in that area?

6 A. Yes, sir. And you can see the gentleman
7 standing on the former well pad, and behind him is the
8 marsh grass and the submerged marsh. The vegetation is
9 growing on the spoil banks at the edge of the well pad.

10 Q. Uh-huh.

11 A. The trees --

12 Q. There's no boat around there, right there,
13 right?

14 A. No. The boats can come right up to it on
15 either side.

16 Q. Well, but you would agree he's standing there
17 on, on the soil?

18 A. He is on the well pad, yes, sir, which we
19 plan to remediate.

20 Q. What, did he swim to it?

21 A. No. That's up against the road. And we'll
22 access it from where that picture's being taken.

23 Q. Okay. Good.

24 Why don't we go to the next one. AOI 6.

25 A. Yeah, that's in the middle of the flotant

1 marsh -- or looking out towards the flotant marsh.

2 Q. Okay.

3 A. And that does look like land, but it is not.

4 Q. Do you know if your photograph photographers
5 were on the boat every time they took one of these
6 pictures?

7 A. Don't know that.

8 Q. You don't know if they were walking around at
9 AOI 1, 2, 3, 4, 5, and 6?

10 A. I do know they were on the ground in those --
11 both during the ICON sampling and during the GHD
12 sampling, and they were equipped with waders.

13 Q. Okay. And they were there both in the spring
14 and in the fall; correct?

15 A. Spring and fall. And winter. Spring --

16 Q. I stand corrected. You're right, spring and
17 winter. Is that right?

18 A. Yes, sir.

19 Q. Okay. All right. Let's go to the next one.

20 This is AOI 7. Did you walk right out there?

21 A. I don't recall seeing that, that projection
22 of it, because it was -- no one related the
23 difficulties of getting down the road with the
24 pipeline, and I don't know if I saw that particular
25 shot.

1 Q. Well, based upon your experience out there,
2 is that pretty firm ground right there?

3 A. No.

4 Q. You think you could walk right out there on
5 that property?

6 A. On that little patch, which is probably the
7 embankment of the canal which is immediately adjacent
8 to it, yes, sir.

9 But to the left, you can see the palmetto
10 growing. That, it drops off significantly and is wet.

11 Q. Okay. Now, when these photographs were
12 taken -- I haven't noticed you in any of these
13 photographs. You're not representing to the folks on
14 the panel that you were out there on these particular
15 days, right?

16 A. That's, that's correct. And as you can see
17 in person, I'm not very photogenic, so I didn't want to
18 get in any of them.

19 Q. Well, my point is that you don't know where
20 your photographer was taking these pictures from;
21 right?

22 A. No, sir, not entirely true. They're embedded
23 with GPS coordinates.

24 Q. Okay. Well, you know that there were a
25 series of people that were out there every day that

1 your photographers were out there taking pictures;
2 correct?

3 A. That's correct. We also had a professional
4 photographer out there taking pictures.

5 Q. There was some of the plaintiffs, the
6 property owners' representatives, who were with your
7 photographers. Right?

8 A. To my knowledge, yes, sir.

9 Q. And they would maybe be in a better position
10 to tell the panel where those pictures were taken than
11 you were since you weren't out there; correct?

12 A. That's a possibility, yes, but the GPS
13 coordinates won't lie.

14 Q. Okay. But just in terms of where the
15 pictures were taken from, you acknowledge you were not
16 out there. You were out there two days, and those
17 aren't the two days that the photographs were being
18 taken?

19 A. Yeah. And to be clear for the record, I did
20 not take any photographs; my staff did.

21 Q. Right. All -- none of the photographs that
22 were shown to the panel today did you take or were you
23 present when they were taken?

24 A. I don't know about the latter, but the former
25 is correct.

1 Q. Okay. All right. Let's go -- let's go to
2 the next one, please.

3 A A fair representation of AOI based upon your
4 recollection when you were out there those two days?

5 A. Yeah. That's the -- the areas. If you
6 recall on my presentation, it showed the active
7 operations area. The areas that we were going to
8 address under AOI 8 were off the road down into the
9 wetland areas.

10 Q. Right. Okay.

11 All right. And you've seen this New
12 Orleans/Algiers Attackapas Provision report; correct?

13 A. It was -- I think that's a document y'all
14 produced, yes, sir.

15 Q. Uh-huh. As a part of our expert reports. Go
16 to the next page.

17 You're aware that this document describes the
18 conditions back in the 1850s of this particular area?

19 A. I'm not of the latter part. I don't know
20 where this document's describing. They didn't have --
21 I didn't see a map in there --

22 Q. Well --

23 A. -- to the property, no.

24 Q. Well, let me just ask you: Would you
25 agree -- let me go right down the middle of this --

1 that the soil on the Raceland property is "generally
2 moist but firm enough to bear up men at all times and
3 cattle in dry weather"?

4 A. You're reading under the red line?

5 Q. I am six lines up. It's the red line kind of
6 about a quarter of the way up from the bottom.

7 And let me just make my question clearer.

8 In your two times out on the property, would
9 you agree that the soil on Raceland property is -- and
10 I'm going to read this now -- is "generally moist but
11 firm enough to bear up men at all times and cattle in
12 dry weather"?

13 A. No. Mine was more indicative of the line
14 right below it that says "very boggy, impossible to
15 cross on foot."

16 Q. Okay. So you disagree that it's generally
17 moist but firm enough to bear up men at all times?

18 A. I'm telling you the 220 acres we were on was
19 more indicative of very boggy and impossible to cross
20 on foot.

21 Q. Okay. Let's go to the next one.

22 Let's skip this.

23 Let's skip that.

24 Skip that.

25 Skip that, please.

1 Skip the next two. And next three.

2 Next one.

3 Next one.

4 Okay. So we are -- we have talked about the
5 areas of interest, but there are certain areas on the
6 220 acres which had exceedances of 29-B, which you and
7 Hess have elected not to delineate; is that correct?

8 A. Only into the active tank battery.

9 Q. Well, let's take a look at RS11. Are you
10 familiar with RS11?

11 A. I see it up there, yes, sir.

12 Q. RS12 and 8 and RS7 and SB10. You're familiar
13 with what these are; correct?

14 A. Yes, sir.

15 Q. All right. These are all soil sample
16 locations which -- where samples were gathered which
17 showed there's an exceedance of 29-B; is that correct?

18 A. No, sir.

19 Q. All right. Well, let's -- let's walk through
20 this for just a second. Go to the next one, please.

21 All right. So if we take a look at -- if we
22 take a look at the top one, do you know -- can you see
23 RS11, the sample results there, or is -- it's right
24 next to you, too, Mr. Edwards.

25 A. It's in here?

1 Q. Oh, no. Right beside you.

2 A. Okay. What's your -- I'm sorry. What's your
3 question?

4 Q. All right. RS11, do you see the sample
5 results from RS11 there?

6 A. Yes, sir, I do.

7 Q. All right. Would you agree that there is oil
8 and grease at that particular site?

9 A. You're saying RS11? I don't see oil and
10 grease at RS11.

11 Q. Excuse me. I was referring to -- sorry. I
12 was looking at RS12.

13 Would you agree there's TPH-D contained in
14 RS11?

15 A. There is. And what your table doesn't show
16 is our SD8 which came out. We came into that exact
17 location subsequently and took a sample of it and it
18 passed oil and grease.

19 As you recall from our presentation, we took
20 the most current data if it came from the same interval
21 and same location.

22 Q. Okay. Well, we talked about Chapter 6
23 earlier. You would agree with me that sampling
24 indicated there was TPH-D on the property having
25 delineated the horizontal and vertical extent of the

1 contamination at RS11?

2 A. There is no contamination at RS11. 29-B
3 compliant with our data. The TPH data you're showing
4 up there, as you can see in the first column
5 immediately after the parameters, you have the 29-B
6 standard. You see that's all blank? The reason that's
7 blank is because there are no 29-B standards. It's not
8 an applicable parameter.

9 In addition, your second column, which is
10 your RECAP standards, or screening standards, and we
11 have data from the site that ran TPH and EPH, and it
12 showed that that -- those TPH screening standards were
13 okay.

14 Q. Screening samples under what?

15 A. The screening samples under RECAP, which is
16 not applicable to this 29-B compliant closure plan.

17 Q. But you looked at that in conjunction with
18 the -- with the RECAP standard; correct?

19 A. We looked at it from the litigation
20 perspective.

21 Q. And you used the non-industrial use --
22 correct -- standard?

23 A. Dr. Millner did the evaluation. I won't go
24 into that detail. I'll let him opine on that.

25 Q. All right. Well, you see RS12 there. Let's

1 just move around from RS11.

2 So let's just be clear for the panel. These
3 constituents were detected in some of the analytical
4 data that was taken from the property, and Hess and GHD
5 are not proposing to do any delineation -- any further
6 delineation at RS11; is that correct?

7 A. That is correct. It is compliant with 29-B,
8 and there's no reason to do any 29-B compliant play.

9 Q. Let's talk about RS12.

10 We've found all of these constituents;
11 correct? THP, and ICON and all the other people that
12 were involved in sampling, and the database itself
13 provided that these concentrations under RS11 were
14 found in all of that data that was taken from the
15 property; is that correct?

16 A. Well, I'm confused. Are you talking about 11
17 or 12?

18 Q. No. I'm talking about 12 now. We're done
19 with 11.

20 A. No. No, sir. That's not correct. You're
21 not showing our data. That's SDA, which shows that the
22 oil and grease is compliant.

23 Q. Well, this data comes from the -- comes from
24 Raceland; correct?

25 A. That data was taken prior to our samples.

1 That's older data.

2 Q. Well, I asked did this sample come from
3 Raceland on the oil and grease?

4 A. Raceland being this 220 acres?

5 Q. Yeah.

6 A. Is that what you're referring to?

7 Q. Yes.

8 A. Yes, sir. The sample came from that
9 location.

10 Q. All right. And RS12 would show that in this
11 sampling data, that it was 1.8 -- 1.18 percent oil and
12 grease; correct?

13 A. That's what that data showed. We
14 subsequently went back and sampled and it was below the
15 standard.

16 Q. Did you go out and do a delineation of the
17 extent of the horizontal and vertical extent of the
18 contamination --

19 A. There's no non-compliant issue to delineate.

20 Q. I'm sorry?

21 A. There's no non-compliant issue to delineate
22 based on the most current data. It shows it's in
23 compliance. There's nothing to delineate.

24 Q. Well, let's do it like this. If we take
25 RS11, RS12, RS8, RS7, SB10, and all of these other

1 datas that are outside of your areas, these are all
2 areas pursuant to which, despite data in the case, Hess
3 does not propose to delineate the horizontal and
4 vertical extent of the waste in those areas?

5 A. Well, the first thing --

6 Q. Is that correct?

7 A. The first thing --

8 Q. And I would like you to answer -- if you'll
9 give me that is a correct, you can explain all you'd
10 like. But I would like an answer to that.

11 A. Could you ask the question again, sir?

12 Q. On RS -- at site RS11, RS12, those were
13 sample sites, right? Those were where samples were
14 gathered?

15 A. That's the plaintiffs' sample location, yes,
16 sir.

17 Q. Right. So we're on the same page with this.

18 So RS11, RS12, RS8, RS7, SB10, SB1, SB2, and
19 SB2 -- well, I guess, again, all of those sites where
20 samples were gathered, it is a correct statement that
21 Hess does not propose to do any further delineation of
22 horizontal and vertical extent of the contamination; is
23 that correct?

24 A. That statement is correct, but your tables
25 don't show all the data. You omitted our data, which,

1 for some of the TPH sites, collected TPH and EPH.

2 Q. Okay.

3 A. And that's not shown on here.

4 Q. All right. So with regard to that data --
5 and I understand your position, there's other --
6 there's other data. But at those sites, whatever that
7 is, there's no proposal to do any further delineation;
8 correct?

9 A. That statement is true.

10 Q. Okay. All right.

11 So what Hess proposes to do is to leave all
12 of that out there on the property; correct? At all of
13 those -- one, two, three, four, five, six -- eight
14 separate sampling spots, Hess proposes to leave that on
15 the, the, the property for the subject of this hearing?

16 A. There's no non-compliance with 29-B at those
17 sites. It's protective of human health and the
18 environment and there's no, no reason to do anything at
19 those sites.

20 Q. Okay. Let's go to --

21 All right. Now, let's talk a little bit
22 about the constituents of concern inside of your AOIs.
23 You would agree that your proposed areas where you're
24 going to excavate materials into the -- to mitigate the
25 contamination, you are going to leave -- you are going

1 to leave 29-B parameter materials in those AOIs;
2 correct?

3 A. In the areas that we propose to excavate?

4 Q. Yeah.

5 A. No, sir. We'll be compliant with 29-B. For
6 29-B parameters, we will be compliant. You're showing
7 barium. That's not true total barium.

8 Q. True total barium. Oh, you're talking about
9 at SB2?

10 A. Yeah.

11 Q. Okay.

12 A. That's not a 29-B parameter.

13 Q. All right. But whether it's a 29-B parameter
14 or not, you're proposing to leave it there on the site;
15 correct?

16 A. We're going to get rid of the true total
17 barium if it exceeds the given AOI to the regulatory
18 standard under 29-B.

19 Q. Okay.

20 A. That's what our most feasible plan is
21 intended to do. That's how it's designed to deal with
22 it.

23 Q. So you're going to excavate as deep as you
24 have -- Hess is going to excavate as deep as it has to
25 go to get all the barium to comply with 29-B?

1 A. The true total barium. And we know where
2 that's at based on our assessment of the site. That's
3 how we built our mitigation plan and developed our cost
4 estimate.

5 Q. Well, you may have an opinion about how it's
6 going to work out, but you have more samples of that;
7 correct?

8 A. Not for delineation of true total barium, no.

9 Q. All right. Let me go through the cost.

10 I believe your -- and I just have this as a
11 -- this is part of your report. I believe you said
12 that your cost estimate was going to be about
13 \$2,900,000-something. Is that correct?

14 A. That's approximate, yes, sir.

15 Q. All right. But I want the panel to be clear,
16 that that excludes any mitigation for areas of interest
17 No. 1 and 2; correct?

18 A. Yes, sir. Because they're both passive
19 closures.

20 Q. If passive closure is rejected, you would
21 agree with me that the number that you've reported as
22 the -- as the potential cost for this mitigation is
23 \$3,246,600; is that correct?

24 A. Yes, sir. We have a contingency plan.
25 Should the agency deem the passive closure was not

1 acceptable, we have a contingency plan that was around
2 \$3.2 million.

3 MR. JONES: Okay. That's all the questions I
4 have.

5 THE HEARING OFFICER: Redirect?

6 MR. LAPEZE: Just a couple of questions.

7 FURTHER EXAMINATION

8 BY MR. LAPEZE:

9 Q. Mr. Edwards, Mr. Jones asked you some
10 questions about coastal zone regulations. You remember
11 those questions?

12 A. Yes, sir.

13 Q. He, he asked you about if you took into
14 consideration coastal zone regulations in conjunction
15 with your feasible plan you present -- presented in
16 this case; is that correct?

17 A. That's correct.

18 Q. Now, you've closed hundreds of pits in
19 Louisiana according to your earlier testimony; correct?

20 A. That is correct.

21 Q. And have you had the opportunity to close
22 pits in the coastal zone?

23 A. Yes, sir.

24 Q. Have you ever been required to comply with
25 any coastal zone regulations in terms of the standards

1 that need to be applied with respect to closure of any
2 of those pits?

3 A. I've never closed an exploration and
4 production pit where 29-B was superseded by any other
5 regulation.

6 Q. Thank you.

7 Mr. Jones also asked you some questions
8 regarding the time that you spent out at the property.
9 And according to your testimony, you went out to the
10 property a couple of times; correct?

11 A. That's correct.

12 Q. In terms of your role with GHD in supervising
13 the investigation that was done, did you have the
14 opportunity to have regular contact with your team that
15 was out on the property on a regular basis?

16 A. I was the project manager for the project. I
17 talked to them every day.

18 Q. Every day?

19 A. Every day.

20 Q. Okay. And did you have the opportunity to
21 coordinate with your team with respect to the locations
22 of where there were issues on the property that needed
23 to be further addressed or delineated?

24 A. Yes. And they brought it to my attention
25 when they identified such locations.

1 Q. And what about with respect to any pictures
2 that they took out on the property, did you have the
3 opportunity to coordinate with your team in terms of
4 the locations of where those pictures were taken and
5 what was being shown in those pictures?

6 A. Yeah, the only input I provided on that was
7 to give a representative pictorial of the site.

8 Q. Right. But in terms of coordinating with
9 your team in terms of what they were seeing on a
10 day-to-day basis on the site and what they were
11 capturing in photographs, you had the opportunity to
12 coordinate with your team and understand exactly what
13 they were seeing?

14 A. That's correct. They would bring the
15 photographs to my attention and say, you know, You need
16 to see this, you need to see this, that type of stuff.
17 And then we would coordinate future photographs from
18 that.

19 Q. And was all the information that you gathered
20 on those numerous meetings in coordination with your
21 team, were they confirmed by your own site visit out to
22 the property?

23 A. They were.

24 Q. Okay. Mr. Jones also asked you an issue
25 about pit closures. And you had seen occasions where

1 pits that may have been closed in the 1980s when 29-B
2 was amended, and investigations after those pit
3 closures took place, that there may have been some
4 issues presented after further investigation had been
5 done. Do you remember that?

6 A. Yes, sir.

7 Q. Okay. And you said that you've seen that
8 before?

9 A. Yes, sir. Especially in the early '80s when
10 we were learning how to do it.

11 Q. Okay. And that's really one of the big
12 issues with these Legacy cases, is it not?

13 A. It is.

14 Q. And you've seen that quite a bit in
15 conjunction with the litigation that's come about with
16 respect to pit closures and that sort of thing;
17 correct?

18 A. That's correct.

19 Q. So it's -- it has not been rare that you have
20 seen issues where a pit may have been closed in the
21 1980s that further investigation afterwards,
22 particularly in the context of litigation, reveals that
23 there may be some additional issues that need to be
24 addressed; correct?

25 A. That is correct. In that time period.

1 Now, as you get older, as I think Mr. Jones
2 asked me, it becomes rare. But in the early '80s, the
3 industry was trying to grasp what 29-B was about and
4 how to do it, and it was a learning process.

5 MR. LAPEZE: Okay. That's all I have.

6 THE HEARING OFFICER: I'll ask the panel, do
7 you all want to meet outside briefly and talk
8 or are you ready to go?

9 MR. PENNINGTON: Let's meet out there.

10 THE HEARING OFFICER: We are going to stay in
11 the same place. They are going to ask
12 questions.

13 (Pause.)

14 THE HEARING OFFICER: Okay. I will start to
15 my right. Mr. Campbell?

16 MR. CAMPBELL: I have no questions at this
17 time.

18 THE HEARING OFFICER: Ms. Love?

19 MS. LOVE: No questions at this time.

20 THE HEARING OFFICER: Mr. Pennington?

21 MR. PENNINGTON: Yeah, I've got a couple just
22 to clarify.

23 BY MR. PENNINGTON:

24 Q. Are you -- are we saying that the whole, that
25 whole 220 acres, is that all flotant marsh? Is that

1 what you're -- is that --

2 A. Well, we're saying it's a submerged wetland
3 outside of the elevated roadways. The interior, which
4 is, if you recall, Ms. Gladstone put up the inundated
5 area that I drew?

6 Q. Uh-huh.

7 A. That's where the majority of the flotant
8 marsh is outside of the canal. Now, the canals border
9 that area as well.

10 Q. So what percentage of the -- of the
11 impoundment do you think is -- would be considered
12 floatant marsh?

13 A. I'd say -- now, different from submerged
14 wetland, but the flotant marsh portion of it I'd say
15 about maybe two-thirds.

16 Q. Okay. Okay. I didn't see anywhere where
17 there was a -- we don't have -- is there -- do you have
18 a vegetation list of vegetation that you found inside
19 the submerged wetlands that would help confirm that
20 it's actually a submerged wetland?

21 A. Well, I can tell you I'm not a plant expert,
22 so I don't want to put myself on the record, but I can
23 tell you what I read in the other expert reports. And
24 maybe Dr. Rodgers can address that during his
25 testimony, but both CEI and it was my understanding

1 Dr. Rodgers said -- and I'm going to try to pronounce
2 this right -- Panicum?

3 Q. Panicum, yes.

4 A. Yes.

5 Q. So the flotant marsh, that's -- I can
6 understand that. That's what they call a thin mat, and
7 that's a Panicum?

8 A. Yeah. It's not very thin. That's, that's
9 some --

10 Q. Yeah, what they call a thick mat --

11 A. Right.

12 Q. -- is more maidencane and all that kind of
13 stuff?

14 A. And maybe Dr. Rodgers can elaborate on that a
15 little better than I can articulate it.

16 Q. So let's go back to the one-third of the
17 220 acres that you said is not flotant marsh but is
18 submerged marsh.

19 A. Yes, sir.

20 Q. How do you, how do you get to that land?

21 A. It's -- they had to tromp through it in
22 waders and boots.

23 Q. And you -- okay. And that one-third, would
24 it be inundated 50 percent of the year plus one?

25 A. It's my understanding from the, the site

1 observations and the data we have and the, the expert
2 said it is submerged a majority of the time. It's
3 more --

4 Q. Is that over 50 percent of the time --

5 A. That's my understanding, yes, sir.

6 Q. And on the AOIs where you determined your,
7 your constituent of interest, those were, those were
8 analyzed for all the 29-B parameters and the only one
9 that you considered a COC was ones that exceeded 29-B;
10 am I correct?

11 A. No, no, that's not -- that's not correct.
12 The -- the plaintiffs took samples. We took split
13 samples and they ran them for a suite. If you remember
14 my presentation, they have the lower right-hand box,
15 they have a suite of 29-B parameters they ran. Based
16 on what exceeded 29-B from that sample, that was our
17 COC that we subsequently delineated with the yellow
18 boxes. Okay?

19 Then the blue boxes, the pre-excavation and
20 post-excavation samples, are going to take the complete
21 suite of 29-B parameters and analyze composite samples
22 from those locations to demonstrate that the other
23 constituents under 29-B are not of concern; that the
24 COC that we identified as being of concern is fully
25 delineated and is the only constituent of concern.

1 Does that make sense?

2 Q. So in the beginning the whole -- each AOI,
3 all of the -- all the 29-B constituents weren't
4 analyzed; right? Is that what you're saying?

5 A. There's a few spots that they ran there was a
6 complete list, but the majority -- if you look at that
7 whole initial set of sampling data, no, the complete
8 list was not uniformly run across the site.

9 Q. Okay. Just to make sure. On, on the
10 submerged wetlands, there's nothing in the, in that
11 220 acres that you would consider anything but
12 submerged wetlands?

13 A. That's not manmade. The roads and the --

14 Q. Yes, yes, excluding those.

15 A. Yes, sir.

16 MR. PENNINGTON: Okay. I have no further
17 questions.

18 THE HEARING OFFICER: Mr. Cash or Mr. Lapeze,
19 any questions?

20 MR. CASH: We call Dr. John Rodgers, sir.

21 (The witness stood aside.)

22 THE HEARING OFFICER: Thank you, Mr. Edwards.

23 THE WITNESS: Thank you.

24 THE HEARING OFFICER: Good afternoon,
25 Dr. Rodgers.

1 THE WITNESS: Good afternoon, sir.

2 THE HEARING OFFICER: Okay. The court
3 reporter is going to swear you in.

4 (Witness sworn.)

5 THE COURT REPORTER: And will you spell
6 Rodgers for me?

7 THE WITNESS: R-O-D-G-E-R-S.

8 WHEREUPON, JOHN H. RODGERS, JR., PH.D.,
9 having been duly sworn, testified as
10 follows:

11 THE HEARING OFFICER: Okay. Don't get too
12 close. But try to speak in the mic so we can
13 all hear you.

14 THE WITNESS: Yes, sir.

15 MR. CASH: Madam Court Reporter, let me get
16 this square so you can hear me. Madam court
17 reporter, there will be two Dr. Rogers.

18 THE HEARING OFFICER: This is R-O-D, right?
19 R-O-D-G-E-R-S?

20 MR. CASH: Right. When I refer to this Dr.
21 Rodgers, it's Rodgers with a "D." If I refer
22 to what I will probably call the other Dr.
23 Rogers, there is no "D." And I know that's
24 going to get confusing. So if you're --

25 THE COURT REPORTER: Can you give me the

1 first name of the other Dr. Rogers?

2 THE HEARING OFFICER: His name is William.

3 (Discussion off the record.)

4 MR. CASH: How about if I do this? He's with
5 Omega, I believe, is the name of his company.
6 And I'll refer to the Omega report or the
7 Omega issues. Will that be okay?

8 THE COURT REPORTER: That will be fine.

9 Thank you.

10 DIRECT EXAMINATION

11 BY MR. CASH:

12 Q. All right. Dr. Rodgers, would you please
13 introduce yourself to the ladies and gentlemen of the
14 panel?

15 A. Good afternoon. I'm John H. Rodgers, Jr.

16 Q. And, Dr. Rodgers, how are you employed?

17 A. I work for a university called Clemson
18 University in South Carolina.

19 Q. All right. What's your role with Clemson
20 University?

21 A. Well, currently, I'm in the department of
22 forestry and environmental conservation. I am an
23 environmental toxicologist, and I direct the
24 ecotoxicology program. I'm a professor.

25 Q. Where did you attend undergrad?

1 A. Well, I attended -- in keeping with family
2 tradition, I attended Clemson University back in the
3 day. Back in 1968. So... My dad had gone there. My
4 sons broke that tradition, though.

5 Q. All right. And after graduating from
6 Clemson, did you get your master's degree?

7 A. I did. I got my BS in 1972. And then I got
8 my master's degree in 1974 at Clemson, also.

9 Q. All right. What was your bachelor's in?

10 A. My bachelor's in that time was in botany and
11 biology, and my master's degree was in botany and plant
12 ecology.

13 Q. Did you then go on to earn a Ph.D.?

14 A. I did.

15 Q. And what was your Ph.D. in?

16 A. Well, in the, in the interim, I got called
17 into the Air Force in 1972, just, just to show you
18 there was a gap. Then they sent me back for my
19 master's.

20 And then they called me back in '74 and said
21 we need you. And then by the time I could get back to
22 Strategic Air Command, they said we don't need you. So
23 would you like to go back for a Ph.D.? So I turned
24 around in 1974 and went to Blacksburg, Virginia, to
25 Virginia Tech, got my Ph.D. in 1977.

1 Q. And in what discipline?

2 A. I was in aquatic toxicology and biology at
3 that time.

4 Q. All right. Are you currently a professor in
5 the department employed through the environmental
6 conservation?

7 A. I am.

8 Q. And are you the director of the ecotoxicology
9 program at Clemson?

10 A. Yes, sir, I am.

11 Q. All right. Without going through the whole
12 list, I'm going to go through some of the courses
13 you've taught in your career as a professor.

14 Have you taught biology?

15 A. Yes, sir.

16 Q. Ecology?

17 A. Yes, sir.

18 Q. Ecotoxicology?

19 A. Yes, sir.

20 Q. Risk assessment?

21 A. Yes, sir.

22 Q. Sediment toxicology?

23 A. Yes, sir.

24 Q. Wetlands and aquatic toxicology?

25 A. Yes, sir.

1 Q. All right. And in addition, you've served on
2 the board of a number of organizations; is that
3 correct?

4 A. Yes, sir, I have.

5 Q. All right. What is SETAC?

6 A. SETAC is the Society of Environmental
7 Toxicology and Chemistry. It's an organization for
8 people that do what we do, essentially risk assessment
9 and work on risk mitigation issues and all that sort of
10 thing. It's a society, as it says, for environmental
11 toxicologists and chemists.

12 Q. Not only have you been on the board, you were
13 elected president of that organization?

14 A. Yes, sir, I was.

15 Q. All right. Did you attend the SETAC World
16 Council?

17 A. Well, I helped form the world council and I
18 was -- at the inaugural meetings, I was the
19 representative from North America to the SETAC World
20 Council, yes, sir.

21 Q. Okay. Now, you've also served in a variety
22 of advisory capacities for various governmental
23 entities?

24 A. I have done that, yes, sir.

25 Q. Were you on the review panel for the U.S.

1 Environmental Protection Agency's EcoRisk Program?

2 A. I was, yes, sir.

3 Q. All right. The Environmental Biology Panel
4 Advanced Technical and Scientific Recommendations
5 regarding prioritizing environmental research?

6 A. Yes, sir, I was.

7 Q. Were you served -- have you served as an
8 invited scientist to a joint SETAC/U.S. EPA workshop on
9 Ecological Risk Assessment?

10 A. Yes, sir, I have.

11 Q. Have you been on the expert advisory panel
12 for the Canadian Network of Toxicology Centres?

13 A. Yes, sir, I have. And helped found that
14 organization.

15 Q. And I want to -- at least from a
16 qualification point of view, there's a couple of things
17 I want to focus on.

18 You've recently won a couple of awards; is
19 that correct?

20 A. Yes, sir.

21 Q. And those awards are specifically applicable
22 here. They are for risk assessment in wetlands; is
23 that correct?

24 A. Risk mitigation, actually, in wetlands.

25 Q. Okay. Risk mitigation in wetlands?

1 A. Yes, sir.

2 Q. Which is what we're trying to do?

3 A. Yes, sir.

4 Q. All right. Those two awards were one awarded
5 by U.S. Department of Energy; correct?

6 A. Yes, sir, it was.

7 Q. And the other one was the President of the
8 United States Award; correct?

9 A. Yes, sir.

10 Q. All right. What was the award -- the
11 President of the United States Award, tell me about
12 that award.

13 A. That was an award that he called it "closing
14 the circle." He has a Closing the Circle Environmental
15 Award where you -- my understanding is you, basically,
16 use green approaches to solve problems.

17 Q. And how many of those do you know were
18 awarded?

19 A. There's only one a year.

20 Q. And you got it?

21 A. Yes, sir. Along with the Department of
22 Energy, so...

23 Q. Along with the Department of Energy. All
24 right.

25 Now, how many -- with this work that you've

1 done in risk mitigation, mitigation of wetlands, and
2 wetland work, how many peer-reviewed textbooks, papers,
3 articles, would you say that you have written at this
4 point in time on those subjects?

5 A. It's approaching 150. Something like that.
6 I lose count.

7 Q. In your years doing what you do, more than 30
8 years of doing what you do, have you become familiar
9 with wetlands, how to characterize them, what they
10 offer?

11 A. Yes, sir, I have.

12 Q. How to mitigate them?

13 A. Yes, sir.

14 Q. All right. One of the things that I don't
15 know this panel knows that's in here is not only do you
16 research and analyze wetlands, you build them?

17 A. Yes, sir. I actually slog around in the mud
18 and build wetlands.

19 Q. And tell me what the purpose is when you
20 build wetlands?

21 A. Well, a lot of issues are related to
22 mitigation of things like metals and organics and
23 complex mixtures. We, for example, worked on produced
24 waters. We worked on fugacity saturation waters,
25 complex waters. We're currently working on the oil

1 sands process waters up in Alberta, Canada. So
2 designing wetlands to sequester those materials and
3 treat those materials.

4 Q. Tell me -- and I've got a list of some -- a
5 partial list of your qualifications and there's no
6 reason for me to go back through these. But tell me in
7 this case what were you retained to do here?
8 Basically, aid us, give your opinion on wetlands
9 issues, mitigation issues, risk issues?

10 A. Initially, yes, sir, that was the question,
11 yes, sir.

12 Q. And for the purposes of this hearing, have we
13 narrowed that to soil in particular and AOI 1 and 2
14 where we are seeking passive closure?

15 A. That's what we're focusing on here. That's
16 what I was asked to focus on here.

17 Q. All right. First I want to talk about
18 there's been discussion already and testimony about the
19 characterization of this property, what type of wetland
20 it is. You're familiar with that?

21 A. I heard some just a bit ago, yes, sir.

22 Q. All right. Under Statewide Order 29-B, a
23 submerged wetland area is defined as a "wetland area
24 which is normally" -- "normally" -- "inundated with
25 water and where only levee material is available for

1 mixing with waste fluids during closure of a pit."

2 Have you had an opportunity to review both
3 photographs, do a personal site visit, look at the
4 types of soils, plants, that are available --

5 THE HEARING OFFICER: Is this part of the
6 tender?

7 MR. CASH: Oh, I'm sorry. I'm sorry.

8 I would tender -- I went right past it.

9 I would tender Dr. Rodgers as an expert
10 in the fields of biology, ecology,
11 ecotoxicology, risk assessment, wetlands, and
12 aquatic toxicology, plant ecology, aquatic
13 biology, risk mitigation, and risk mitigation
14 and wetlands.

15 THE HEARING OFFICER: Okay. Do you accept
16 him?

17 MR. JONES: I accept him.

18 THE HEARING OFFICER: Okay. So he's accepted
19 as tendered.

20 MR. CASH: And I have those, that list
21 actually written out if it will help you
22 afterwards. I will show it to you
23 afterwards.

24 THE COURT REPORTER: It certainly would.
25 Thank you.

1 BY MR. CASH:

2 Q. All right. Based upon that definition and
3 based upon your knowledge of the 220 acres, is this a
4 submerged wetland area that we're dealing with?

5 A. Yes, sir, it is.

6 Q. Now, we have seen pictures. And I think you
7 were in here at the last of cross-examination where
8 there was some pictures shown where the property wasn't
9 completely underwater.

10 Does that change your opinion about whether
11 or not this is a submerged wetland area?

12 A. No, sir. Those pictures don't change my
13 opinion about this area.

14 Q. All right. Let's talk about the
15 characterization of the property, the submerged wetland
16 environment.

17 And you've seen the various reports from some
18 of plaintiffs' experts, have you not?

19 A. Yes, sir, I have.

20 Q. All right. In the CEI report, the statement
21 was made that, "The subject property of the Raceland
22 oil and gas field generally exists in a submerged
23 landscape."

24 Do you agree with that statement?

25 A. Yes, sir, I do.

1 Q. All right. In the ICON report, "This area is
2 now a semi-permanent flooded floatant marsh."

3 Do you agree with that statement?

4 A. Yes, sir. In general, yes, sir.

5 Q. And finally, the CEI: "The vast majority of
6 the Raceland field is covered by a floatant" -- help me.

7 A. Panicum.

8 Q. Thank you.

9 -- "Panicum marsh with a profile that
10 includes emergent vegetation, a living root mat, a dead
11 peat mat, a layer of clear water, a zone of organic
12 sludge that overlies a clay pan."

13 Is that consistent with your finding?

14 A. That's consistent with what I saw when I was
15 out there, yes, sir.

16 Q. All right. I asked Mr. Miller in his
17 deposition: "Would you agree with me that as we sit
18 here today, this property meets the definition of an
19 inundated wetland."

20 And do you recognize "inundated wetland" and
21 "submerged wetland" to be interchangeable terms?

22 A. Yes, sir.

23 Q. All right. He says, "It does today."

24 Do you agree with that answer?

25 A. Yes, sir, I would agree with that.

1 Q. All right. And earlier the panel got to see
2 photographs from around the property. And I want to
3 kind of walk through some of those photographs and ask
4 you: Is this consistent -- are these photographs
5 consistent with what you found when you went out on
6 your site visit?

7 A. Yes, sir. I was out there in January, and
8 saw the sites that we are talking about today, and --
9 much of the other property, and this is consistent with
10 what I saw, these photographs that you've shown so far.

11 Q. All right. And were you also able to analyze
12 photographs that were taken at various times of the
13 year? For example, this one's in March.

14 A. Yes, sir. I've looked at those.

15 Q. Were those photographs consistent with the
16 "submerged wetland" title you've given this property?

17 A. They are certainly consistent with what I
18 would expect.

19 Q. When you were out there, did you see the
20 presence of cypress trees?

21 A. Yes, sir, I did.

22 Q. Let's talk about AOI 1 and AOI 2 in
23 particular.

24 Tell me about the environment that you found
25 out there. What was the ecosystem that you found when

1 you were out there?

2 A. Well, it's a very, very active place as you
3 can imagine. Even in January when I was there, we
4 could see remnants of Schoenoplectus, also known as
5 Scirpus, bulrush, Schoenoplectus californicus,
6 actually. We've done lots of work and published lots
7 of papers on the environmental requirements and
8 tolerance of that species.

9 When I'm out there looking at the marsh, I'm
10 not doing the boat-ride thing. I'm -- on a, on a
11 project like this, I'm interested in the health of the
12 vegetation, the distribution of the vegetation, the
13 density of the vegetation; any physiological symptoms
14 of stress on the vegetation; whether or not that
15 vegetation is indicating that it wants to attach to
16 soil or wants to detach from the soil; any signs -- in
17 the winter I'm sure you folks know that baldcypress is
18 a deciduous tree, and so it drops its needles in the
19 winter. So you've got to look a little harder if
20 you're out there in the winter, you want to try to
21 understand what's going on with baldcypress. And so I
22 paid particular attention to the baldcypress on this
23 property, as well as the emergent vegetation, the
24 herbaceous vegetation, along with the woody vegetation
25 because that woody vegetation is long-lived. You can

1 approximate the age of much of that vegetation out
2 there. So...

3 Q. And why is the condition and the type of
4 vegetation important to you in what you do?

5 A. Well, vegetation is certainly one leg on the
6 stool -- I call it a three-legged stool when I'm
7 talking to my students. Forgive me. Vegetation is a
8 very important leg on that stool.

9 I probably should have mentioned that I teach
10 the U.S. Army Corp of Engineers courses on wetland
11 design and wetland delineation, and taught what they
12 call their prospect courses for years to their natural
13 resources managers for the various districts. And we,
14 we would always spend an equal amount of time on
15 vegetation, make sure that the plants got their due,
16 along with the other organisms out there as well as the
17 soil and the water, the "hydroperiod" is what term I
18 use, or "hydrology." The hydroperiod is important to
19 me.

20 Q. You said that there's a three-legged stool
21 you look at. Does that determine what type of wetland
22 you have and the health of the wetland?

23 A. In -- in part. The type of wetland as well
24 as the health of the wetland.

25 Q. Tell me what the three legs are. You've

1 already mentioned vegetation. What are the other two
2 legs of that stool?

3 A. Well, as part of that, I'm interested in the
4 soil, hydrosol or sediments, whatever we're going to
5 call it. A lot of times I simply use the word
6 "hydrosol" just because it's -- as in this case, it's
7 a wetted soil.

8 Q. And the third property?

9 A. And the third one is the hydroperiod. In
10 other words, what is the depth of inundation; how
11 frequently is the inundation; what's the character of
12 that water; what's the character of that water with
13 time; and how -- is that driving the vegetation and/or
14 is the vegetation responding strongly to that in a
15 positive way or a negative way.

16 Q. And in assessing those three legs here, first
17 let's talk about -- let me go to the soil.

18 What type of soil do we have here?

19 A. We've got primarily what I would call mucky
20 clay. The soil surveys are more specific, but it's
21 what I would call clay muck.

22 Q. And why is that important in determining,
23 one, the health compared to what you are seeing and,
24 two, whether or not this would be an elevated wetland
25 or a submerged wetland?

1 A. Well, in terms of the submerged wetland, what
2 we're starting to realize is that, in submerged
3 wetlands, we can accumulate organic matter because the
4 half-life of the detritus -- in the cold weather, after
5 frost, these plants are going to be producing detritus.
6 And that half-life of that detritus is important in
7 whether that wetland sinks or grows; whether it -- what
8 I call an accreting wetland, whether it forms an
9 organic base and continues to build. And so I was
10 particularly interested in the vegetation and how that
11 vegetation influenced the soil and vice versa in
12 this -- this wetland. In this wetland, we've got quite
13 a bit of organic matter in the sediments.

14 Q. We've talked about vegetation and you've
15 given us a few examples. Were you able to look at your
16 entire list of vegetation that was observed on the
17 property in this 220 acres?

18 A. Yes, sir. I had that list with me when I
19 went out, as well as I spent some time out there myself
20 just confirming the species on that list.

21 Q. Would this be a list of the species that were
22 documented on the site?

23 A. Yes, sir. That's a list that Mr. Wilson put
24 together, Mr. Walker Wilson, put together. He did a
25 particularly good job in this case of finding the

1 vegetation and photographing the vegetation on this
2 site.

3 Q. And I'm sure when we give the PowerPoint to
4 the panel, it will be helpful to the court reporter to
5 have a number of the spellings and words that you have
6 been using thus far on this list.

7 Were you able to observe these -- these
8 different types of vegetation when you were out there?

9 A. Most of them. There were a few that weren't
10 that obvious in the wintertime, but certainly enough of
11 them to support the notion that this is a submerged
12 wetland.

13 Q. Would it also support the notion that this is
14 a thriving submerged wetland?

15 A. Absolutely. And not -- not just the
16 diversity here. This -- is, this is a pretty unusual
17 and pretty exceptionally diverse site here. But not
18 just that it's diverse. It's also densely packed.
19 There's a certain amount of vegetation you can pack
20 into an area, and this is very, very densely packed.

21 Q. Now, wildlife is something else that you
22 consider when you're making your determinations and,
23 more particularly, when you are trying to determine how
24 to mitigate a certain situation?

25 A. Absolutely. It's important in terms of

1 whether or not there are risks and whether or not risks
2 need to be mitigated, along with the vegetation.

3 Q. Tell me some of the things you look for.

4 A. Well, I'm, again, looking for diagnostic
5 symptoms of stress, and those diagnostic symptoms of
6 stress can occur on the individual level or they can
7 occur on a population level. If I was out here and I
8 didn't see some of these particular species that I
9 would expect to find in this wetland, I would be
10 concerned and I would want to pursue that further.

11 Interestingly, in this wetland, you see
12 essentially all the species that you would expect to
13 find in a submerged wetland.

14 Q. Tell me about the importance to see that --
15 one -- you have alligators, we have owls, we have bald
16 eagles out there. Tell me the importance to you of
17 the -- both the health and the presence of apex
18 predators.

19 A. Well, the apex predators are particularly
20 important because if there's something in the system
21 that is affecting their food or food source or there's
22 something accumulating in the system that would -- you
23 probably remember when we focused 20, 30 years ago on
24 mercury, and we saw that brown pelicans and other sort
25 of sentinel species and systems were telling us that

1 they had a problem. We had to drill down through that
2 and find out what the problem was.

3 When we see a species like a bald eagle or an
4 alligator or some sort of apex predator at this site,
5 it's particularly important to us to observe that
6 species, observe its behavior, and whether or not we've
7 got any evidence of reproduction, and, of course,
8 survival going on and reproduction going on at the
9 site.

10 Q. And with regard to reproduction, were you
11 able to see when you were out there reproductive
12 evidence of frogs, for example?

13 A. Well, I didn't stay long enough to observe
14 these animals involved directly in reproduction, but I
15 was able to see that there were -- what I call "young
16 of the year," that there were animals that had been
17 newly produced and were surviving through the winters.

18 Q. Now, I have read in some of the older studies
19 where something that would be done would be to capture
20 some of the animals, basically kill them and then study
21 their tissue.

22 Is that something that -- one, is that
23 something you did here and is it something you would
24 recommend doing here?

25 A. I did not do that here and I would not

1 recommend doing that either, no, sir.

2 Q. Explain that to me.

3 A. Well, back in the day -- again, we used to do
4 some things years ago that we don't do now. Back in
5 the day, it was popular to go out and collect an
6 animal, maybe collect this raccoon *Procyon* here, and
7 analyze its tissue and see if it's exposed to
8 something. And now we need an animal care use permit.
9 We have to go through an animal health committee. We
10 have to justify doing that, justify taking these
11 animals to do analysis.

12 In order to do that, I have to provide them
13 with a good reason for that. In other words, I have to
14 have some evidence that there's an exposure or some
15 evidence that there is some indication of adverse
16 effects. Otherwise, they will tell me, I can't approve
17 of you taking that animal's life to essentially show us
18 that, that it's in good shape.

19 So at this site, we had no indication that
20 there was a problem. So I didn't see any reason to
21 take any animal life.

22 Q. Now, focusing particularly on AOI 1 and
23 AOI 2, passive closure areas, there are two
24 constituents at issue. One is oil and grease and the
25 other is true total barium. Are you aware of that?

1 A. Yes, sir.

2 Q. All right. I would like for you to explain
3 to me -- and we'll come back to this. I would like for
4 you to explain to me a little bit, do you consider
5 either of those, in AOI 1 or AOI 2, a sufficient risk
6 to justify digging them up and doing whatever damage
7 would be necessary to this wetland environment to do
8 that?

9 A. No, sir, I do not.

10 Q. All right. Let's talk about that, and I want
11 to start with the true total barium.

12 Would you explain to the panel, because
13 you're going to probably explain it a way that I won't
14 understand anyway. Would you explain to the panel who
15 will understand it the characteristics of the barium
16 and why you have not considered barium to be a risk in
17 this area?

18 A. Well, based on the data that we have, in my
19 view, it's clear that this barium is barite. We have
20 got some excavated facts from data from a site nearby.
21 We have got all of the indications -- if you know
22 barium and you remember the old analytical technique
23 when we work in the water, we used to measure sulfate
24 in water. And we would use barium -- actually, barium
25 chloride to measure sulfate. If you look in standard

1 methods, that's a standard way of measuring sulfate in
2 water. You just add barium chloride. That sulfate
3 globes onto that barium forming barite. Those barite
4 crystals are suspended in water, and that optical
5 density of that barite solution is proportional to the
6 sulfate in the water. So that's basically how that
7 sulfate analysis works.

8 If there's barium in water and there's
9 sulfate in water, there is a great affinity for barium
10 to, to combine with sulfate forming barite. So if
11 there's any sulfate around on this site, then you are
12 going to have barite.

13 The other forms of barium are relatively
14 soluble. Things like barium hydroxide, barium
15 chloride, and so on, if they are on the site and you
16 inundate this site or you have a submerged wetland, you
17 are not going to have barium around there very long.
18 It's going to move and disperse.

19 So there's, there's every line of evidence
20 that you can pursue in a case that this is barite.

21 So then the next step is how does that --
22 what does that mean in terms of toxicity.

23 So then if I have got barite and it's not
24 very soluble, it turns out that the toxicity is
25 proportional to solubility. And so I have made a

1 statement in this case, actually, earlier that I had
2 never seen a paper on barite toxicity where toxicity
3 had actually been confirmed in the field. And I got
4 some responses. I got some looks, you know. And my --
5 my answer was, I've never seen it. And so some -- some
6 papers were put in front of me, and I looked at them,
7 read them carefully, and I have still never seen a
8 paper that indicated that barite was toxic in nature.

9 So it's interesting that barium has all of
10 these different forms, but it's very important from a
11 risk-assessment perspective to know which form you are
12 working with and to understand the different forms of
13 barium.

14 Q. And when you talk about bioavailability, at
15 least for my benefit, can you explain to me what
16 "bioavailability" is?

17 A. Bioavailability can have a couple of
18 definitions. Bioavailability can have one definition
19 that stems from uptake, and is it uptaking an
20 accumulated organism? And by "it," I mean whatever
21 element we happen to be talking about. We could be
22 talking about arsenic, mercury, zinc, chrome, lead,
23 whatever. So is it uptaking and is it accumulated an
24 organism? Is it bioavailable?

25 And then toxicologists like to take that to

1 the next level and say, Is it uptaken and accumulated
2 in or on an organism sufficiently to cause an adverse
3 effect? So can it, can it cause an adverse effect in
4 or on that organism? And so that's -- I use both of
5 those as my definition of "bioavailability."

6 Q. And given -- given the type of barium --
7 barite -- that we have out here, and the plants species
8 and animal species that are present that you have seen,
9 do you consider the barium for AOI 1 and AOI 2 in the
10 form of barite to be any threat to this ecosystem?

11 A. No, sir, it's not.

12 Q. And now you mentioned before you have never
13 seen a situation where barite was toxic. You said you
14 got some looks and some papers were put in front of
15 you. Do you remember that?

16 A. That's correct, yes, sir.

17 Q. All right. We made a list here. And Omega
18 Environmental, which is the other Dr. Rogers, with a
19 "G," not a "D," he mentioned some papers or criticized
20 you with some of the filings about some of the barite
21 comments you made. Do you remember that?

22 A. Yes, sir, I do.

23 Q. All right. Let's go through -- and you're
24 going to understand this better -- but the Johnson
25 paper in 1960, that was one of the papers that Dr.--

1 Omega Dr. Rogers cited; correct?

2 A. Well, he actually used that in his risk
3 analysis.

4 Q. All right. Now, tell me why that Johnson
5 study in 1960, was that the "chicken paper" as you call
6 it?

7 A. That's the chicken paper.

8 Q. Explain what the Johnson experiment was and
9 explain to me why it would not be applicable to the
10 situation we have here in our submerged wetlands with
11 the animals we find out here and with the barite that's
12 present on the property?

13 A. Well, first of all, the risk assessment is a
14 challenging process. And as professionals, we have to
15 do a careful job. If we were interested in evaluating
16 barium on this property, we would want to use barite
17 values for toxicity reference values or screening
18 values, called ecological screening values, ESVs.
19 Unfortunately, there are not many of those out there
20 for barium as barite, because, as I've said, that's a
21 very difficult study to do. You can -- I only know of
22 one study where they were able to kill the animals with
23 barite, and that was a study where they divulge -- they
24 fed the barite to the mice, and fed them so hard and so
25 fast they actually killed all the, the mice.

1 This particular chicken study that we are
2 talking about here, Johnson, et al., was done in
3 Colorado at one of the medical schools out in Colorado
4 years and years ago, 1960, back when you could give a
5 chicken a hard time. So they fed that chicken, as I
6 recall, they put that barium in some gelatin pellets
7 and forced that barium down that chicken's throat. It
8 was a laboratory study. They fed that chicken barium
9 hydroxide. Very important. Barium is not what we're
10 talking about here. Barium hydroxide is very soluble.
11 So it's not the kind of barium we are talking about
12 here.

13 And they found that there was some toxicity
14 at about 128 milligrams per kilogram. If you loaded
15 that chicken up with 128 milligrams per kilogram,
16 barium hydroxide in a capsule, they had some issues.

17 Q. And, again, we're talking here about the
18 barium hydroxide not true total barium or barite; is
19 that correct?

20 A. That's correct.

21 Q. So this study that was referenced by Omega
22 Dr. Rogers would be inapplicable?

23 A. It would be inapplicable. Or if you are
24 going to apply it, you need to do it very, very
25 carefully.

1 Q. All right. What about the Cranford study in
2 1999 involving sea scallops?

3 A. Well, this was from a table of papers
4 purporting to say that barite is toxic. So I said,
5 well, you know, I've got to -- I need to learn
6 something here. So I'll go read these papers.

7 So I pull the paper from Cranford in 1999.
8 It's on sea scallops. And Cranford was exposing sea
9 scallops to barite in some, what I call, artificial
10 streams. These sea scallops have to have saltwater.
11 So it's an interesting environment to be looking at
12 barite in.

13 But he was having to pump the barite, in
14 other words, stir the barite and swirl the sea scallops
15 around. And he was not able to measure mortality due
16 to barite because he lost his power supply. His power
17 supply failed him. He was unable to keep the barite
18 suspended. So he was unable to attribute the mortality
19 directly to barite. That was a power supply issue in
20 '99.

21 Q. What about Sprague and Logan in '79 with the
22 rainbow trout?

23 A. John Sprague's, interesting fellow, in 1979
24 he and Logan -- Logan was working on his master's
25 degree. And he was doing a rainbow trout study trying

1 to measure LC50s -- termed lethal concentrations for
2 50 percent of the rainbow trout population that was
3 exposed. And he found that 76,000 -- at
4 76,000 milligrams per kilogram, half of the rainbow
5 trout were dead. And I said that's not -- doesn't make
6 a lot of sense. Let's see if we can drill down in here
7 and figure out what's going on.

8 And he said, in the introduction, he said
9 barite was among the least toxic materials that I
10 evaluated. They were evaluating a lot of materials
11 associated with drilling muds and so on.

12 And he -- I concluded that those were pumps
13 effects -- pump effects. In order to keep the barite
14 suspended, he had to either sandblast or barite blast
15 the fish. And so if you drill down through that paper,
16 you were seeing that the pump was running at 6
17 centimeters a second. So that pump is moving that
18 water, pounding those fish at 6 centimeters per second.

19 And the reason why I know to look for these
20 things is that we've published papers on the effects of
21 suspended solids and suspended materials on organisms,
22 and that's something that you really have to watch for.
23 That would not meet the acceptance criteria for papers
24 for consideration today because that exposure is well
25 in excess of the solubility of barium as barite.

1 Q. And so Sprague and Logan teaches that it's --
2 THE COURT REPORTER: I'm sorry, sir. Would
3 you repeat that?

4 MR. CASH: I said -- yes.

5 BY MR. CASH:

6 Q. So Sprague and Logan teaches that it's
7 hazardous to rainbow trout to sandblast them, to
8 sandblast their gills with barite or anything else?

9 A. It's hard on the fish if they get hit with
10 particles.

11 Q. What about a more recent study, earthworms in
12 2013 by Lamb?

13 A. That's a more recent study. This was
14 published in "Environmental Science and Technology."
15 That's an Australian paper. So that was of interest.
16 I said what in the world do they do with barite and
17 earthworms and how did they expose those earthworms to
18 barite. And so I read that paper, and it's actually
19 not barite. It's barite mining waste. And they made
20 that point in the paper.

21 Early in the paper on page 4,670, they state
22 that, "Barite is insoluble in water, acids and bases,
23 and on its own it's unlikely to cause a risk to humans
24 or the environment."

25 So -- so barite in and of itself, again, is

1 not the problem. The conclusion that they drew is that
2 barite was there and barite was related to the problem
3 and correlated with the problem. But in order to
4 actually convincingly conclude that barite is a
5 problem, they would have to do this experiment over
6 because there are lots of other materials associated
7 with barite, or this was a barite ore mine in
8 Australia, and, in this particular deposit, there are
9 lots of other materials.

10 Q. And within that paper would you agree with
11 the statement that, "Barite is insoluble in water,
12 acids and bases and on its own is unlikely to cause a
13 risk to humans or the environment"?

14 A. I would agree with that, yes, sir.

15 Q. By the way, Dr. Rodgers, only a scientist
16 would say "early in the paper at page 4,670."

17 All right. Finally, we have Clark and
18 Patrick in 1987 with lancelets. What is a lancelet?

19 A. A lancelet happens to be estuarine or marine
20 invertebrate. It's a burrowing animal, an animal that
21 likes to sort of drill down in the sediments probably
22 on the order of 2 or 3 centimeters into sediments.

23 And they found an EC50. So now we've shifted
24 gears from LC50 -- LC50 is lethal concentration. EC50
25 is effective concentration. So that's effective

1 concentration that affected 50 percent of the
2 organisms. And this is effective concentration on
3 burrowing. So it's not really killing the animals.
4 It's just altering their burrowing habits.

5 And they found that at 570,000 milligrams per
6 kilogram, 570,000. And they said, "There's
7 insufficient toxicity to calculate an LC50."

8 So they really didn't have toxicity, per se,
9 that altered the burrowing. But if you read on back in
10 that paper, it says, The burrowing was not affected in
11 the sediments where you had exposure for a period of
12 just -- I think it was on the order of 48 hours or so,
13 maybe a little bit longer than that. If you had some
14 contact time. I call that weathered sediment that had
15 been amended with barium. And it's on page 161.

16 Q. So I -- so that I can understand then, now,
17 570,000 milligrams per kilogram sounds like a lot to
18 me. Is it?

19 A. That's a pretty good bit.

20 Q. And there was insufficient toxicity to
21 calculate the LC50. Now, when you say the burrowing
22 was not affected in weathered sediment, the only time
23 the burrowing was affected, as I understand it, from,
24 from what you have told me, is that when it was almost
25 pure barium when they first put it in. Once it was

1 weathered and had a chance to mend with the soil at
2 all, still no effect?

3 A. That's correct.

4 Q. And the barium we have out in this area has
5 been weathered for a while, hasn't it?

6 A. A while, yes, sir.

7 Q. Okay. I want to turn now and talk about the
8 other constituent, which is the oil and grease.

9 Oil and grease is a little more unique
10 situation, isn't it?

11 A. Yes, sir, it is.

12 Q. Okay. What is a TRV?

13 A. A TRV is a toxicity reference value.
14 Sometimes you use that term when you're talking about
15 screening level risk assessment.

16 I tend to use that term more when I'm doing a
17 more definitive risk assessment, a site-specific risk
18 assessment. But it's a toxicity reference value that
19 says how much of the material has to be in or on an
20 organism, particularly taken up by ingestion often; by
21 exposure through ingestion, through feeding. And it's
22 how much ends up in or on the organism and elicits a
23 response.

24 That TRV is typically the no-observed effects
25 concentration. It is typically a screening value that

1 is below any value where you have effects. So the TRV
2 that we look at is typically below -- below the
3 lowest-observed effects concentration and at a
4 no-observed effects concentration.

5 Q. And are there reliable TRVs for owners?

6 A. Not -- no, sir, there aren't. And the reason
7 there aren't reliable toxicity values for oil and
8 grease is because oil and grease is a generic
9 parameter. It's sort of like saying I have got this
10 amount of -- sort of like talking about salt and what
11 kind of salt do you have. Do you have strictly sodium
12 chloride? Do you have calcium chloride? What sort of
13 ratio do you have?

14 In oil and grease, it's what ratio of
15 aliphatics/aromatics do you have? What particular
16 compounds do you have? How much naphthalene?
17 Azo-naphthalene? Fluoranthene? Other constituents
18 that are in oil and grease. How much of those do you
19 have? And by the time you get done with analysis,
20 that's changed. If you're in a weathering environment
21 or weathered environment, things are changing
22 constantly.

23 So it's -- it's a pretty challenging
24 experiment to do. People have tried. There are
25 actually publications, scientific publications, out

1 there where people have tried to develop TRVs for oil
2 and grease, but they are simply not reliable.

3 Q. Now, is this a situation then where your
4 observations of how the plant -- what the situation is
5 with the plants, the animals in the area of the oil and
6 grease, would -- would that be an important observation
7 for you to make in your assessment and your analysis?

8 A. Absolutely.

9 Q. All right.

10 Now, you're aware, are you not, that in AOI 1
11 where we're talking about, the oil and gas production
12 associated with the area where 4 percent oil and grease
13 was found, discontinued in the mid-1960s?

14 A. I'm aware of that, yes, sir.

15 Q. Would that half a century of time give us a
16 pretty good look at and whether the sediment -- would
17 it give us a pretty good look at whether -- whether or
18 not there had been impacts or effects from that oil and
19 grease?

20 A. Well, it's certainly an opportunity to see
21 those effects, if they are going to occur.

22 Q. So we have this one spot of oil and grease.
23 And one of the things the panel is going to have to
24 decide is would it do more harm than good to go dig
25 that out at AOI 1. And the same thing with barium, AOI

1 1 and AOI 2. So let me start again with barium.

2 You're somebody who builds wetlands. Okay.
3 So you have pretty good idea of their sensitivity and
4 what a wetland is like?

5 A. Yes, sir.

6 Q. This is your property. If you have built
7 this wetland, would you want the panel to send someone
8 out there to dig out the barium?

9 A. No, sir.

10 Q. What about the oil and grease?

11 A. No, sir.

12 Q. In your professional opinion, given
13 everything you have done with wetlands and your
14 specialty in wetlands, frankly, being the President's
15 Award winner on mitigation of wetlands, would you -- do
16 you believe that active closure of this pit, active
17 removal of the spot of grease, oil and grease, the
18 spots of barium, would cause more harm to this delicate
19 ecosystem than good it would do to remove it?

20 A. I would -- I would say I have worked an awful
21 lot in wetlands, and it's clear to me it would cause
22 more harm than it would do good to go after it. I can
23 conceive of no way to go after that that would not
24 cause more harm than it would -- it would not repair
25 something that's not broken.

1 Q. Don't -- the old saying, "If it ain't broke,
2 don't fix it"?

3 A. That's right.

4 Q. Thank you, Dr. Rodgers.

5 MR. CASH: Tender the witness.

6 CROSS EXAMINATION

7 BY MR. JONES:

8 Q. Those analysis of plants and animals and
9 other species out on the property, that was pretty
10 important to your opinion, wasn't it?

11 A. The analysis of the plants?

12 Q. The analysis? Your, your observations of the
13 plants and the animals and the various species out on
14 the property, was that pretty important to your
15 analysis?

16 A. My observations were important in terms of
17 the time I was out there and the diagnostic symptoms
18 that I knew to look for.

19 Q. You have seen all these pictures. You were
20 at AOI 1, and AOI 2, and 3, and 4 through 8 and other
21 parts of the property; correct?

22 A. Yes, sir.

23 Q. Yeah. The fact of the matter is, that, Dr.
24 Rodgers, is you were on the property for five hours in
25 the entire time of your evaluation; correct?

1 A. I was on the property for five hours in an
2 airboat most of that time, yes, sir.

3 Q. One time in two years you have been on this
4 property for five hours; correct?

5 A. One time this year, yes, sir.

6 Q. Were you on the property last year?

7 A. No, sir.

8 Q. The year before that?

9 A. No, sir.

10 Q. Ever before?

11 A. No, sir.

12 Q. Did you see a raccoon on the property while
13 you were out there?

14 A. As I recall, I did not.

15 Q. Did you see a rabbit while you were out
16 there, or an alligator, or a squirrel, or a frog?

17 A. I did, yes, sir.

18 Q. Which one?

19 A. I saw a rabbit, an alligator, a squirrel and
20 a frog, yes, sir.

21 Q. In five hours?

22 A. Yes, sir.

23 Q. That's pretty good. That's pretty good.

24 All right. Just so we're clear, that's how
25 long you were out on the property?

1 A. Yes, sir. Five hours, yes, sir.

2 Q. All right. Now, let's pull up his -- have
3 you got that?

4 Now, you are aware of the areas on the
5 property that dioxin was found by Hess' consultants;
6 correct?

7 A. Yes, sir, I am.

8 Q. Yeah. And you believe -- you did not do an
9 ecological or a toxicological risk assessment of that
10 because you believed that that was going to be cleaned
11 up by Hess; correct?

12 A. No, sir, that's not correct.

13 Q. All right. Do you understand that to be --
14 the dioxin to be cleaned up by Hess or is going to be?

15 A. I understand that dioxins were found at two
16 sites on this property. And that my understanding was
17 that one of the sites was going to be picked up in the
18 remediation and that one of the sites was not.

19 Q. Uh-huh. Okay. Is that still your
20 understanding?

21 A. Yes, sir.

22 Q. Okay. So, so you're unaware, then, in RS11,
23 RS12, RS8, and RS7, and SB10 that Hess is not planning
24 on doing any further delineation or remediation in
25 those areas; is that correct?

1 A. I'm not sure. You would have to talk to Mr.
2 Edwards about that.

3 Q. Well, just as part of your toxicological risk
4 assessment, you did not evaluate dioxins as part of
5 your study in this report; is that right?

6 A. No, sir, I did not do that originally. And I
7 have done that since, since my deposition.

8 Q. You would agree with me, dioxins are --
9 that's a pretty serious toxicological compound?

10 A. Well, I don't disagree with that, but that
11 just doesn't tell us much.

12 Q. Okay. All right. But you, up until the time
13 that you had been deposed as an expert, you had not
14 done an assessment of the dioxin on the property; is
15 that right?

16 A. Other than to see where it was and what
17 depth. And my conclusion was it was found at, as I
18 recall, 2 to roughly 6 feet deep. And I didn't see how
19 these organisms would be exposed to the dioxin. So I
20 elected not to include that in my risk assessment.

21 Q. All right.

22 A. At that time.

23 Q. Now, did you say -- pardon me for these
24 PowerPoint slides. Did I hear you say that the barite
25 at AOI 1 would move pretty quickly; that it shouldn't

1 stay there for very long. Did I understand you to say
2 that correctly to Mr. Cash?

3 A. No, sir, you didn't understand. I should
4 perhaps go back over that?

5 Q. Yeah, if you don't mind. Would you just do
6 that, because I want to make sure I understand that.

7 A. If it's, if it's barite, it's going to sit
8 right there. It's not going anywhere. It's not going
9 to do anything. So it's like having play sand out
10 there.

11 If it's barium hydroxide, barium chloride,
12 perhaps barium carbonate, some other form of barium,
13 the solubility's orders of magnitude greater. In other
14 words, if I take barite and stir it around in that
15 water out there, I should get something on the order of
16 3 milligrams per liter. That's all. That would be
17 maximum solubility. That's the maximum solubility in
18 water that I have ever seen.

19 Q. Uh-huh. And what were the concentrations of
20 barite at AOI 1?

21 A. AOI 1, I don't remember right off the top of
22 my head. I did not memorize that number. I'm sorry.

23 Q. All right. Do you know when they stopped
24 operating the site at AOI 1? Do you know the well
25 history and when that site was -- when that site was

1 abandoned?

2 A. I'm not absolutely certain. I think it's on
3 the order of 1960s.

4 Q. That's exactly right. 19-, 1960.

5 What does that tell you about the type of
6 barium this is?

7 A. Well, if there's still barium out there, it's
8 barite.

9 Q. Okay. Let's -- let's move to, I believe,
10 what your overall opinion here is that the -- this is
11 an ecologically sound piece of property; correct?

12 A. Yes, sir.

13 Q. All right. Let's take a look at our next
14 PowerPoint slide.

15 And you've seen these photographs from 1941?

16 A. I have seen that, I think.

17 Q. Okay. Have you seen this one from 1953?
18 Next one.

19 A. I think I have seen that one.

20 Q. All right. Do you notice any impact of Hess'
21 operations on the environment between 1941 and 1953?
22 Just as a trained ecologist, wetland, all of the things
23 that you were tendered for, just as a person sitting
24 here testifying under oath to the panel about the
25 environmental impacts of this operation, do you notice

1 any difference between 1941 and 1953?

2 A. Looks -- it appears to me like some of the
3 trees, there's been some clearing, and some of the
4 trees have been removed. And if you could go back to
5 the previous one.

6 Q. I'm happy to. 1941.

7 A. Looks like maybe there's a pit dug since
8 1941. If you could go forward.

9 Q. Yeah. If we could go forward.

10 A. Looks like there's a pit dug there --

11 Q. Uh-huh.

12 A. -- in the north central portion.

13 Q. All right. Have you seen the 1973
14 photograph?

15 A. I think I have, yes, sir.

16 Q. All right. Would you agree as a -- as an
17 expert in all the fields that you were tendered for for
18 this panel, that there was an environmental impact on
19 this particular area from -- resulting from Hess'
20 operations?

21 A. There's some changes. I don't know that I
22 can say from aerial photographs that that's totally the
23 result of Hess' operations. I don't know that I can
24 sit here and say from just this photograph.

25 Q. Well, that's what I'm going to ask you. As a

1 part of your assessment in this case, have you looked
2 at these three photographs taken, the same five hours
3 that you spent on the property, looked at 1941, 1953,
4 and 1973, and asked yourself so you would be prepared
5 to come to the panel and say, Here's my opinion about
6 why all those trees are no longer on the property. Can
7 you tell them that?

8 A. I don't know that I can tell you specifically
9 why all of those trees are gone.

10 Q. Let's try generally.

11 A. It's likely that those trees were cut and
12 removed from the property.

13 Q. Okay. Is that what your investigation has
14 led you to? Is that your, your most reasonable opinion
15 that you're offering the panel?

16 A. I don't really have an opinion in terms of
17 the exact cause of the removal of those trees or why
18 those particular trees died.

19 Q. Well, let's go to the next slide.

20 Would you agree -- let's just hold right here
21 for a moment -- that the Soil EC from 0 to 4 feet in
22 that yellow area -- do you recognize this as being some
23 of the sampling data that you have reviewed in this
24 case?

25 A. I recognize that as being, as I recall, from

1 the ICON report.

2 Q. You do recall this?

3 A. I think I have seen this.

4 Q. Well, would you agree with me, based upon
5 your review and your preparations to come testify to
6 this panel, that looking at this data that's on this
7 particular PowerPoint slide right in the yellow there,
8 all of these samples are indicating that this property
9 is contaminated? Go back one, please, Connie.

10 Right there where all of those trees have
11 been lost. Would you agree that the plumes identified
12 in -- go forward, Connie -- that area right there is
13 the same area that where we see this environmental
14 impact on this area around the Hess operations?

15 A. I would agree that there's an overlap between
16 the yellow -- whatever the yellow is supposed to
17 represent --

18 Q. Yes, sir. Right.

19 A. -- and some of that area. I can't tell if
20 it's all of it or not.

21 Q. Okay. Now, had you seen both this picture
22 and this yellow area before you came, Dr. Rodgers?

23 A. I think I have seen this before.

24 Q. All right. Is it still your opinion that the
25 loss of those -- that timber -- back up, please -- in

1 that area clearly shown in 1973 is a result of actually
2 people cutting down trees? Is that -- is that really
3 what you're suggesting to this panel?

4 A. I don't -- I don't know that for sure, but I
5 did see that some of the trees had been cut out there.

6 Q. Well, you also saw some of it had been hit by
7 lightning, right?

8 A. Yes, sir.

9 Q. Some had been eaten by bugs; correct?

10 A. Yes, sir.

11 Q. Right. And then there was a whole lot of
12 other ones that were just gone that were there in 1941,
13 right?

14 A. Yes, sir.

15 Q. All right. And the reason I'm asking you
16 this, because you're the guy that's going to come in
17 and say, hey, this property -- it's going to harm this
18 property too much, we're concerned about the
19 environment, Hess, and, and we don't want to do that.
20 But the reality is, that all those trees were lost
21 right in the area where all of these samples have been
22 taken in this case that you have reviewed in
23 preparation to tell this panel whether this property
24 has been impacted by the operations. And you're going
25 to tell this panel that they were -- that all those

1 trees were lost because they were cut down?

2 MR. CASH: I'm going to object to the
3 question. As you will recall, Mr. Balhoff,
4 we tendered him for AOI 1 and 2 and the
5 passive closure specifically. In fact, those
6 are the only two areas that we had him opine
7 about, was AOI 1 and AOI 2.

8 MR. JONES: Well, part of that, Mr. Balhoff
9 -- I'm sorry.

10 THE HEARING OFFICER: Let him finish.

11 He stated that he visited all the sites
12 and he was on the property for all the sites.
13 It's under cross-examination. I'm going to
14 let him answer the question. If he can.

15 BY MR. JONES:

16 Q. All right. Yeah. Is the panel -- I just
17 want the panel to be clear. You were out there for
18 five hours, and you're going to tell them based upon
19 your trip to all of those different AOIs, that those
20 trees on this side of Hess' operation were lost
21 because, in your opinion, somebody went out and
22 chainsawed them or cut them down?

23 A. I would say some of them. I didn't say that
24 was all the case. I would say that we don't know why
25 those trees were lost, not every one of them.

1 Q. All right. Let's go to the next one, Connie.

2 All right. Do you recognize this particular
3 slide? The Soil EC 8 to 12 feet? Excuse me, 4 to
4 8 feet. Sorry.

5 Do you recall seeing this?

6 A. I think I have seen that before, yes, sir.

7 Q. All right. Does this -- does this include
8 AOI 1 and AOI 2 that you're asking for passive closure
9 on?

10 A. I think it does if I can -- as well as I can
11 see, I think it's -- it does or it's on the edge of
12 that, yes.

13 Q. Okay.

14 All right. Would you -- let's go -- let's go
15 to the next one.

16 All right. Here we are on Soil EC 8 to
17 12 feet.

18 Are you familiar with this particular slide?

19 A. I think I have seen that one, yes, sir.

20 Q. All right. And you saw all of these slides
21 in preparation for your report that you did in this
22 particular case?

23 A. As I recall, yes, sir.

24 Q. All right. Did you conclude anywhere in your
25 report for purposes of this proceeding or for purposes

1 of the litigation that any of these contaminants on
2 this one, 8 to 12 feet -- let's go back, Connie -- 4 to
3 8 feet, or two -- or 0 to 4 feet, were having an impact
4 on the environment of this particular property, the
5 Raceland property?

6 A. I don't know that I -- I don't think I
7 concluded that this was having an impact on the
8 Raceland property, no, sir.

9 Q. But your conclusion was, is that it's a
10 flourishing environment and that there's nothing wrong
11 with it?

12 A. It's a flourishing environment. And if we
13 are concerned about the trees, there are trees out
14 there.

15 Q. Well, Mr. Cash asked you a question just a
16 moment ago. You're a wetland builder; correct?

17 A. I do build wetlands, yes, sir.

18 Q. Right. Now, if I went to your house and I
19 put all these plumes on here, said between 0 and 4 feet
20 you have this much contamination on it, and between
21 0 -- between 4 feet and 8 feet, you are going to have
22 this much contamination on it, would you want to leave
23 that on your property?

24 A. It depends on what it is.

25 Q. Well, I'm asking. It's that exact stuff

1 right there, from all three of those last slides, would
2 you like to keep that on your property?

3 A. If this is my property, I can't see tearing
4 it up to go after this.

5 Q. All right. Let's go to the -- let's go...

6 Are you familiar with the Conservation,
7 Protection and Utilization of Louisiana Coastal Wetland
8 Forests document?

9 A. I have seen that document before, yes.

10 Q. Did you read it in connection with, with this
11 case?

12 A. I have read it a couple of times and work
13 with one of the authors almost every day.

14 Q. All right. If we could go to -- you see the
15 part where it says, "A, Forest and Saltwater Intrusion
16 or High Soil Salinity," Section A. And then I'm going
17 to direct you to the left.

18 Dr. Rodgers, you have a screen in front of
19 you, too, if that's easier for you.

20 A. Yes. Yes, sir, I see that.

21 Q. Have you read that before?

22 A. I have seen that before, yes, sir.

23 Q. Were there baldcypresses out on this
24 property?

25 A. Yes, sir, there are.

1 Q. All right. Do you agree that, "For
2 baldcypresses, chronic levels of soil salinity at 4
3 parts per trillion or greater increases mortality of
4 seedlings and makes the likelihood of regeneration
5 unreliable"? Do you agree with that or not?

6 A. I don't disagree with that statement for the
7 purpose that it's made in terms of the coastal
8 environment and encroachment and saltwater intrusion on
9 the coastal environment. I don't disagree with that.

10 Q. Well, do you agree we have baldcypress on
11 this property?

12 A. I do agree we have baldcypress on this
13 property.

14 Q. Do you agree that all of those yellow spots
15 that we just demonstrated to you just a moment ago, the
16 three or four from 0 to 12 feet, indicates salinity
17 contamination on this property?

18 A. I agree that it indicates salinity. I don't
19 know how reliable the samples are or how reliable the
20 plumes are.

21 Q. You didn't take the samples; other people
22 took the samples. But assuming for a moment those
23 sample results were taken in valid areas and sent to
24 Qualified Laboratories, you would agree with me that
25 the areas where those baldcypresses are that were there

1 in 1941 are right in the middle of where the other,
2 from 0 to 12 feet slides that show salt contamination,
3 that those baldcypress trees were right in the middle
4 of them; correct?

5 A. I agree that there were some baldcypress out
6 there that are not there today, but there are also some
7 baldcypress out there today.

8 Q. Now, are you going to take the position after
9 reading this and talking about it the chronic levels of
10 soil salinity and what happens with cypress, the
11 mortality of it, that those trees are still gone
12 because they got chainsawed down?

13 A. This doesn't change my opinion. This is
14 about inundation and saltwater intrusion. This is work
15 done down in the coastal environment. One of the
16 co-authors, Will Connor, is a good friend of mine. I
17 work with Will every day. He's in the same department
18 I'm in. We're on these committees together. And I
19 know what Will's thinking here. He's thinking about
20 the rest of this.

21 These sites where there's saltwater intrusion
22 is of a long-term nature and requires correction. In
23 other words, where there have been areas that have been
24 intruded on by the Gulf of Mexico.

25 Q. Now, do you know if these species that you

1 were talking about just a moment ago, you -- you have
2 been -- you have been a consultant and an expert in a
3 number of these cases; correct? You and I, we have
4 done this before in -- in another case; correct?

5 A. We have met before, yes, sir.

6 Q. Yes, we have. We met just like we met today.

7 You have been a witness in other cases I have
8 been involved in; correct?

9 A. One that I know of.

10 Q. Yeah. One.

11 All right. And in that one case that we
12 were -- we were in together, you offered the same
13 opinion, that the environmental conditions of the
14 property did not, did not warrant disturbing any of the
15 ecology and, therefore, that that -- the material
16 should be left at that particular site; correct?

17 A. I don't recall exactly that opinion, but the
18 gist of the opinion was that the disturbance would
19 cause more harm than good.

20 Q. Okay. So let's use that. That's a good way
21 to say it. The gist of the tender of your testimony
22 was that the disturbance would cause more harm than
23 good.

24 How many times have you offered that
25 testimony in cases in the State of Louisiana?

1 A. Well, the -- several.

2 Q. Have you ever told a panel or a jury or
3 anybody that you have ever consulted with that you know
4 the condition is -- out on the property is that we need
5 to go get this contamination out of there because the
6 harm it's going to cause is going to outdo the good of
7 leaving it there? Have you done that one time in the
8 State of Louisiana?

9 A. Yes, sir.

10 Q. You have. Have you done that in this case?

11 A. I don't -- I don't recall saying in this case
12 in any situation where a constituent needed to be
13 picked up.

14 Q. Well, when --

15 A. Based on the ecological risk.

16 Q. When you did the -- when you rendered the
17 opinion in the other case we were involved in about the
18 disturbance being -- causing more harm than good, you
19 did a full ecological test on exposing fish to
20 sediments -- correct -- and soils?

21 A. Yes, sir.

22 Q. Correct. All right. You did no such test
23 like that in this case, right? All those animals that
24 you saw, the alligators, the snakes, the raccoon, the
25 birds, the squirrels, and the rabbits, or the fish in

1 the canals, did you do any -- did you make any type
2 of -- conduct any type of test to see what type of
3 impact any of the conditions that have been identified
4 in those areas we just put up --

5 A. I did not.

6 Q. -- on those species?

7 A. I did not do toxicity tests in this case.

8 Q. And you didn't because you said you went out
9 there for five hours, and you looked around, and it
10 looked like there had been no environmental impact
11 based upon your professional opinion, and, therefore,
12 no additional testing was needed; correct?

13 A. No additional testing involving the loss of
14 animal lives was indicated.

15 Q. Well, let's talk about the first part of
16 that. You went out there and you didn't do any
17 additional testing on the animals or the plants or any
18 scientific data to bring to this panel where we're in
19 because you went out there and your opinion was, right
20 when you got out there, for the entire five hours you
21 were on the property, that there was no evidence of any
22 environmental stress on the property; is that correct?

23 A. No, sir, it's not. The entire five hours
24 that I was on the property, I was looking for
25 diagnostic symptoms of stress. I know what kind of

1 stress to look for in the plants. I know how the
2 plants physiologically respond to things like oil and
3 grease. Is it going to respond to barite? How they
4 are going to respond to barite. I know what symptoms
5 to look for and the -- as I said, the species that I
6 was expecting to be there were found there and they
7 were healthy.

8 Q. What month were you out at the property for
9 five hours?

10 A. I'm sorry?

11 Q. What month were you there on the property for
12 five hours?

13 A. I was there in January.

14 Q. In January. In the dead of the winter;
15 correct?

16 A. It was not dead -- well, to most people
17 that's the dead of winter. To me it's an ideal time to
18 be out and about.

19 Q. Did you see that little flower that you put
20 up there a few moments ago -- Mr. Cash put up on the
21 thing, he put a couple of little flowers and one looked
22 like a little bow. Do you remember the one I'm
23 referring to?

24 A. I do.

25 Q. You didn't see that when you were out there,

1 did you?

2 A. It was not blooming when I was out there.

3 Q. Of course it wasn't. Okay.

4 All right. Let's go to -- skip that.

5 Skip that.

6 Okay.

7 THE HEARING OFFICER: We are going to take a
8 break sometime in the next 15 minutes. So I
9 don't know where you are in your cross.

10 MR. JONES: If you -- if we can take it now,
11 I could probably be done in five minutes.

12 THE HEARING OFFICER: I would normally take
13 it now. We can wait as long as 15 minutes.

14 MR. JONES: I would rather take it now so I
15 could wrap it up quickly.

16 THE HEARING OFFICER: Okay. Let's do that.

17 MR. JONES: All right. Thank you.

18 THE HEARING OFFICER: Off the record.

19 Let's come back at 3:00.

20 (Recess.)

21 THE HEARING OFFICER: We're back on the
22 record.

23 BY MR. JONES

24 Q. Just a few more -- can you hear me? Just a
25 few more areas for you.

1 In connection with your work on this case
2 when you came to testify for the panelists, despite
3 being a -- let's see, what do we call you? -- an
4 ecology, and a wetlands, an aquatic toxicology expert,
5 that's what you consider yourself; correct?

6 A. Yes, sir.

7 Q. A wetlands and aquatic toxicology expert?

8 A. Yes, sir.

9 Q. All right. You did no wetlands delineation
10 in this particular case; correct?

11 A. I didn't see the need for a traditional
12 wetland delineation in this case.

13 Q. All right. You know what that is, right?

14 A. Oh, absolutely. I teach that to the Corp of
15 Engineers.

16 Q. All right. Okay. But so we're clear, you
17 did no wetlands delineation in this case?

18 A. I did not do a formal wetland delineation in
19 this case, no, sir.

20 Q. You, likewise, did no hydrology work in this
21 case; correct?

22 A. I personally did no hydrology work in this
23 case.

24 Q. You didn't -- you didn't measure the water
25 level on the 220 acres we've been talking about all

1 morning or all morning and all day; correct?

2 A. That was not my job. That was meant for
3 others.

4 Q. I didn't ask whether that's your job. You're
5 an expert in wetland and aquatic toxicology. You have
6 given us an opinion. And I simply want to know whether
7 you did a wetland delineation, whether you did
8 hydrology work, or whether you measured any water
9 levels anywhere on the 220-acre property? And -- I'm
10 sorry.

11 A. If we can take that from the top. Did I do a
12 wetland delineation? And I think I answered, no, sir,
13 I did not.

14 Q. All right.

15 A. And I did not do a formal delineation and I
16 did not see the need for that in this case.

17 The second part about did I do hydrology or
18 water depth work, that was for others to do. I did not
19 do that.

20 Q. Okay. All right. You didn't do that.

21 Did you not have time to do that because you
22 were only out on the property for five hours, or why
23 didn't you do that?

24 A. I said -- as I said, others did that.

25 Q. Well, would you have liked to have done it?

1 I mean, you were out there for five whole hours. You
2 certainly could have measured the water depth anywhere
3 on the 220 acres, right?

4 A. Any time I'm in a wetland, I'm a happy
5 camper. So anything I can do out there, measure water
6 depths, examine plants, look for symptoms of stress,
7 catch fish, catch animals, do, do whatever is indicated
8 that needs to be done, I'm happy to do that.

9 Q. Okay. All right.

10 So you just mentioned "symptoms of stress."
11 That's what I want to begin with.

12 Mr. Cash offered you to this panel as an
13 expert in things from biology, to wetlands and aquatic
14 toxicology, plant ecology. You have got a
15 distinguished career teaching at Clemson.

16 Are you going to suggest to this panel, who
17 is looking for guidance from an expert such as
18 yourself, that there has been no environmental impact
19 on this property, on this 220 acres that Hess has
20 admitted liability for from Hess' operations?

21 A. No, sir, I don't think that's my testimony.

22 Q. Okay. Would you agree with, and based upon
23 all your degrees and your distinguished career at
24 Clemson, that there has been an environmental impact on
25 this property as a result of Hess' operations?

1 A. Well, the Hess -- has to be. You can see the
2 roadways and so on. But that's changed. If by
3 "impact" you mean change. The roadways have been
4 built. The property's been changed for operations.
5 That's clear.

6 Q. Well, let me be clear. I'm not talking about
7 roads and I'm not talking about platforms. I'm talking
8 about looking at this picture in 1973, and with all
9 those degrees and all of the bases for which you have
10 been tendered in this case, are you coming to this
11 panel, looking at our distinguished panel here today,
12 and saying to you, looking at that photograph, knowing
13 the evidence as I do, having been on the property for
14 five hours, it is my testimony as an expert in all of
15 these areas that Hess' operations and contamination
16 found out on the property, it is your opinion, with all
17 of those degrees, that it has had no environmental
18 impact or caused no environmental damage on this
19 property?

20 A. I don't think that's been my testimony.

21 Q. Is it your testimony -- you can tell the
22 panel -- it is your testimony that Hess' operations did
23 cause environmental damage on the property; correct?

24 A. I think Hess' -- it's clear that Hess'
25 operations, the immediate operations in the environs of

1 that industrial operation, has impacted those immediate
2 areas.

3 Q. Including all those areas where all the trees
4 are gone?

5 A. I didn't say that. No, sir.

6 Q. Well, that's what I'm asking you. Would you
7 agree with all your degrees and, and you being an
8 expert in this case, that -- that Hess' operations in
9 the industrial area that you just talked about, knowing
10 about the samples, that it caused part of that
11 environmental damage to that -- those areas where those
12 trees are not there?

13 A. I don't know that I can say that it did or it
14 did not. I don't know that I can parse it out like
15 that.

16 I think that particular photograph indicates
17 to me that there are some levee breaks and some other
18 things going on hydrologically there that have impacted
19 that area.

20 Q. You didn't look at hydrology in this case;
21 correct?

22 A. I did not specifically myself.

23 MR. JONES: Okay. That's all I have.

24 FURTHER DIRECT EXAMINATION

25 BY MR. CASH

1 Q. This is a picture from 1973; correct? It's
2 been represented?

3 A. As far as I -- it looks like it says '73 up
4 there, yes, sir.

5 Q. Okay.

6 Based upon what you saw today, does the
7 property look anymore impacted than it looked in 1973?

8 A. It doesn't look like that today, no, sir.

9 Q. It looks better today, right?

10 A. It's looks quite a bit different, yes, sir.

11 Q. Let me ask you this, though: Certainly
12 impoundment of water and putting water on -- deep
13 water, water log on the property, can affect the
14 cypress trees? I think that's what Mr. Jones is trying
15 to say. You don't disagree with that, do you?

16 A. I don't disagree that you can affect cypress
17 trees by impounding water.

18 Q. All right. Do you know how many hundreds of
19 millions of gallons of water Sterling Sugar dumps on
20 the property adjacent to and around and it uses some of
21 the similar canals? Do you have any idea how --

22 MR. JONES: Objection. He's not rendered an
23 opinion on this at all in this case
24 whatsoever or in the context of this panel
25 hearing at all.

1 MR. CASH: If we look at the supplemental
2 report, actually he has.

3 THE HEARING OFFICER: Wait a minute. Wait a
4 minute. Wait a minute.

5 The -- you have asked him questions
6 about oil and gas impact on these cypress
7 trees. He's asking him about water. Now,
8 he's not saying he evaluated. I will
9 overrule the objection. You can ask the
10 question.

11 BY MR. CASH

12 Q. Certainly you said one of the things you
13 looked at is the overall hydrogeology of the region and
14 the property; correct?

15 A. Yes, sir.

16 Q. Do you know how many hundreds of millions of
17 gallons Sterling Sugar has dumped in this area over the
18 years processing their sugarcane?

19 MR. JONES: Objection; lack of foundation.
20 There's no basis for that.

21 THE HEARING OFFICER: What's the basis for
22 his foundation to be able to testify to that?

23 MR. JONES: I mean, really, there's none.
24 You know, that's a Hail Mary.

25 MR. CASH: It's not a Hail Mary. It's a --

1 you know what? He's got, He's got president
2 of -- he's got the president of the company
3 on his witness list. If, if he's going to
4 call them, then we will go through it.

5 MR. JONES: Okay. That's good. He might
6 have a basis. There's no foundation here.

7 BY MR. CASH

8 Q. Have you done any -- looked at -- let's do
9 the foundation.

10 Have you looked at all at the amount of water
11 that's put out by Sterling Sugar on the property?

12 A. Yes, sir, I have.

13 Q. You have looked at that?

14 A. Yes, sir.

15 Q. Do you know how much has been put out there?

16 A. I don't remember the exact numbers, but it's
17 hundreds and hundreds and hundreds of millions of
18 gallons.

19 Q. All right. There's the foundation. Let me
20 go back.

21 You were asked dioxin. Do you remember that?
22 And you were asked had you done any calculations to
23 determine whether there was a risk with the dioxins.
24 Do you remember that?

25 A. Yes, sir, I recall that earlier.

1 Q. And you said at the time of your deposition
2 you had not?

3 A. That's true, yes, sir, I had not done it at
4 the time of my deposition.

5 Q. Mr. Jones stopped there. Let me ask the next
6 question.

7 Have you since?

8 A. Yes, sir, I have.

9 Q. And what did those -- what did those
10 calculations show you?

11 A. They are very clear. There's no ecological
12 impact from those -- the dioxin on that property.

13 Q. All right. You said -- a big deal was made
14 you had been out there for five hours?

15 A. Yes, sir.

16 Q. Only out there five hours. I think I heard
17 "five hours" for almost five hours.

18 So five hours. How long have you been in
19 the -- made your career out of evaluating situations,
20 evaluating plant life, evaluating and knowing what to
21 look for?

22 A. Well, employed in this area since I was nine
23 years old. So pushing 55 years. Getting on the order
24 of 60 years.

25 Q. I need a clicker.

1 MR. JONES: Oh, here it is.

2 BY MR. CASH:

3 Q. Now, in addition to being out on the property
4 for five hours, did you also -- I'm going to switch
5 over here in a second -- did you also look at the
6 photographs on the list of both animals and vegetation
7 that was seen out there?

8 A. Yes, sir.

9 Q. All right. And Mr. Wilson, that was
10 Mr. Walker Wilson; correct?

11 A. Yes, sir.

12 Q. Their expert?

13 A. Yes, sir.

14 Q. Do you have any reason to believe that he
15 would misrepresent the animals he saw or misrepresent
16 the vegetation he found out there?

17 A. No, sir, I don't have any reason to believe
18 that.

19 MR. CASH: Can we go forward? Next one of
20 these you are getting flip charts. Flip
21 charts and blow-ups. That's what you're
22 getting.

23 THE HEARING OFFICER: Well, you know, I think
24 your side rigged this room up, didn't they?

25 MR. CASH: Oh, I'm not blaming them. I'm not

1 blaming them.

2 MR. JONES: That's shocking.

3 MR. CASH: It is just technology. It's just
4 the way it works. It's Murphy's law.

5 BY MR. CASH:

6 Q. All right. Do you have any reason to believe
7 that this list of wildlife is not accurate?

8 A. I think it's accurate for the time he spent
9 on the property. I don't think it necessarily covers
10 every species that's out there, but I think -- I've
11 been in the field with Walker. I think he does a good
12 job.

13 Q. The vegetation documented on the site, is
14 that the kind of vegetation you would have expected to
15 see?

16 A. Absolutely.

17 Q. All right.

18 Now, certainly you haven't taken the position
19 there are no impacts on this property? In fact, we
20 have got eight AOIs that we have admitted
21 responsibility for and \$3 million worth of clean-up
22 that we've said we would do; correct?

23 A. Yes, sir, that's 29-B driven and not
24 ecologically risk driven.

25 Q. All right. So let me kind of just wrap this

1 up.

2 Well, let me go back one more.

3 You were asked a lot of questions about salt.
4 Now, under 29-B in a submerged wetland, salt is not one
5 of the parameters that we look at.

6 Is it your opinion, based upon all of your
7 experience, education and knowledge, this is, in fact,
8 a submerged wetland?

9 A. Yes, sir, it is clearly a submerged wetland.

10 Q. It was pointed out that you didn't do a full
11 wetland delineation. If I asked you, who's taller, me
12 or Mr. Lapeze, would you have to measure us?

13 A. That's -- that would be a pretty easy one.

14 Q. Okay.

15 A. No, sir.

16 Q. So when you looked at this environment, did
17 you have to do a full-blown wetland delineation to
18 determine whether or not this was, in fact, a submerged
19 wetland?

20 A. That is not rocket science in terms of a
21 submerged wetland. There is no debate in my opinion.

22 Q. All right. Let me go back, then, to the kind
23 of ultimate question the panel's going to have to
24 address on AOI 1 and 2, which is what you were brought
25 for.

1 Based upon what you found, based upon what
2 you have seen, based upon your knowledge, experience,
3 based upon your education and background, do you
4 believe that it would do more harm than good to
5 actively go out and remediate that barite and that spot
6 of oil and grease? Would it do more harm than good to
7 actively remediate that?

8 A. That would be harmful and I don't think it
9 would fix a thing.

10 Q. Better to leave it like it is?

11 A. Definitely.

12 MR. CASH: No further questions. Thank you.

13 THE HEARING OFFICER: Okay. So do I
14 understand correctly that we don't have a
15 witness for the remainder of the afternoon?

16 MR. CASH: We do not. We are far -- you will
17 be happy to hear -- we are far ahead of
18 schedule. And so I would anticipate,
19 depending on how many folks Glad has, I would
20 be surprised if we are not done in our
21 entirety by Tuesday.

22 THE HEARING OFFICER: Okay. That sounds
23 good.

24 MR. JONES: I think I agree.

25 THE HEARING OFFICER: Okay. Okay. So we

1 will adjourn for today, and we will see
2 everybody at 8:30 in the morning.

3 (Discussion off the record.)

4 THE HEARING OFFICER: Okay. Let's just
5 finish up.

6 I apologize to the panel. You all
7 indicated you were recessing early, and I got
8 excited.

9 Okay. One of the questions they have,
10 and then I'm going to let them ask questions,
11 but there's testimony about a dioxin study
12 that was done, dioxin results that were
13 provided after the deposition. Are those
14 available?

15 THE WITNESS: I can make them --

16 THE HEARING OFFICER: That was the question
17 by the panel. That's not my question.

18 MR. JONES: We don't have them. We have
19 never seen them.

20 THE WITNESS: I can make them available. I
21 did them just recently.

22 MR. CASH: I haven't seen them.

23 THE HEARING OFFICER: Well, why don't we
24 think about that overnight. I want to talk
25 to them about it because I realize it wasn't

1 evidence in time, and if there's an objection
2 to it -- I don't know if there's an objection
3 to it. If you-all are in agreement that they
4 can have them.

5 MR. JONES: I'm quite certain I would have to
6 see it before I would know whether I was
7 going to object to it, but --

8 THE HEARING OFFICER: If there's an
9 objection, I'm not going to allow it in
10 because it's just, just happened, but if the
11 two sides agree, we'll let them have them.

12 MR. CASH: And because -- it's kind of
13 awkwardly, why I didn't go before the
14 deposition, I thought that begged the
15 question -- and that's the only reason I
16 asked the question. I didn't seek to ask him
17 to produce or introduce that because I know
18 that Glad didn't have a copy. So that's why
19 I didn't introduce it.

20 MR. JONES: And we probably don't need to
21 spend a lot of time on it worrying about
22 whether we will object only because we can't
23 in the middle of this process get some new
24 analysis.

25 THE HEARING OFFICER: Okay. So we're not --

1 we're not -- we're not going to accept it
2 then.

3 MR. CASH: That's what we had intended.

4 THE HEARING OFFICER: Okay. Mr. Campbell,
5 any questions?

6 MR. CAMPBELL: I have no questions.

7 THE HEARING OFFICER: Ms. Love?

8 MS. LOVE: No further questions.

9 THE HEARING OFFICER: Mr. Pennington?

10 MR. PENNINGTON: I have no questions.

11 THE HEARING OFFICER: Okay. I'm going to let
12 them go. Do we have some exhibits that we
13 are going to introduce on the record?

14 MR. LAPEZE: I think we are, Mr. Balhoff. In
15 furtherance of your request for us to
16 continue to update our exhibit list and have
17 a running list for you at the beginning of
18 each morning, I just want to make sure that
19 we're on the same page in terms of what's
20 coming in. And we have got a series of
21 things that the panel has seen today, some of
22 which I think may already be attached to the
23 report, the CDs for...

24 MR. CASH: You want to let them go so....

25 THE HEARING OFFICER: Yeah, they can go.

1 MR. LAPEZE: Let's do that. It's just
2 administrative.

3 MR. CASH: Unless y'all think this is
4 fascinating.

5 (The witness stood aside.)

6 (The panel stepped aside.)

7 THE HEARING OFFICER: Okay.

8 MR. LAPEZE: So we have got, we have got five
9 things. We have got CVs for both the
10 witnesses that testified today, Tom. We have
11 got Frank Edwards and John Rodgers. These
12 are contained within the reports that are
13 already in the record. These are updated.
14 So we wanted to get the most updated CV.

15 THE HEARING OFFICER: Okay. You can mark
16 them, and we will accept them. Yeah, they
17 are in the CVs, and also there's an exhibit
18 in Appendix A that had some resumes on that.

19 MR. LAPEZE: I think that's right. But as I
20 understand it, these were the most updated.

21 THE HEARING OFFICER: Just mark them in
22 whatever the next document order, put them on
23 the list. I'm sure you don't object to that?

24 MR. JONES: No.

25 MR. LAPEZE: And we also have excerpts from

1 the ICON March 5, 2014, report and the CDI
2 March 5, 2014, report. And these were
3 excerpts that were shown in the PowerPoints
4 today, statements made by the -- by ICON and
5 CEI related to the status of the property
6 being a submerged wetland, and this is simply
7 where they came from. They were used in the
8 PowerPoint.

9 THE HEARING OFFICER: I know those weren't
10 designated, but those witnesses are coming
11 and I assume --

12 MR. JONES: They are.

13 THE HEARING OFFICER: -- so you can mark them
14 and put them in. You can use them with those
15 witnesses.

16 MR. LAPEZE: We would be happy to wait.

17 THE HEARING OFFICER: No, no. You don't need
18 to wait. You can mark them. Do it anyway
19 you feel you're comfortable doing.

20 MR. LAPEZE: And the last thing that we have,
21 Tom, is this was shown in Mr. Edward's
22 PowerPoint, and I know that the PowerPoint
23 itself is not a -- is not going to be an
24 exhibit for the purposes of the record.

25 THE HEARING OFFICER: Is that the 220 acres?

1 MR. LAPEZE: This is the 220 acres.

2 THE HEARING OFFICER: Yeah, I would like it
3 marked and put in because I never saw a
4 picture of that anywhere before this.

5 MR. LAPEZE: Right.

6 THE HEARING OFFICER: In any event --

7 MR. HUDELL: Well, Tom, it's just -- I don't
8 know how that was made. I don't know --

9 MR. LAPEZE: Well, I think he laid a
10 foundation for it --

11 THE HEARING OFFICER: He said it was a metes
12 and bounds. He testified it was a metes and
13 bounds.

14 MR. HUDELL: Oh, okay. If I could just see
15 the underlying data. I mean, there's no
16 objection. I would just like to see how that
17 was made.

18 MR. LAPEZE: Sure. That's fine. He had his
19 GIS --

20 THE HEARING OFFICER: And if you want to put
21 it in in the morning, if you want to look at
22 it overnight. Are you saying that you have a
23 problem?

24 MR. LAPEZE: Kevin, we can get you a copy.

25 MR. HUDELL: That sounds fine.

1 THE HEARING OFFICER: So are we going to take
2 it now or in the morning?

3 MR. HUDDALL: You can take it now. I would
4 just like to get the backup.

5 THE HEARING OFFICER: Okay. So you can mark
6 it.

7 MR. LAPEZE: And the PowerPoints with the two
8 witnesses that we used today, we will go
9 ahead and mark those as well.

10 THE HEARING OFFICER: I want those marked and
11 those are not going to be evidence. What
12 they have been used for in the past is if the
13 panel is hunting for evidence, it just helps
14 guide them a little bit, but it's not to be
15 relied on as evidence. So mark those and we
16 will use them as exhibits -- not use them as
17 exhibits, but they will be marked as an
18 exhibit.

19 MR. LAPEZE: So that's seven items that I
20 think we have total that we have got six on
21 our list now. So tomorrow morning you will
22 have 13, if my math is right.

23 THE HEARING OFFICER: You -- Mr. Jones, you
24 used an exhibit with a bunch of historical
25 photographs which I was told was going to be

1 66.

2 MS. DASCHBACH: I think it's 67. I think the
3 drawing that Frank Edwards did is 66, both of
4 those.

5 THE HEARING OFFICER: And you used it, I
6 don't know if you are going to offer it at
7 some point later or you want it in connection
8 with his testimony. I mean, his testimony it
9 was used, and it's going to be needed to
10 follow his testimony. So either -- they may
11 object to it. I know they object to all
12 these historical photographs, but if you want
13 it in with, with today or you want to wait.

14 MS. DASCHBACH: Well, and I was talking to
15 James about this. The list that we
16 circulated to counsel that we gave to you
17 today has those on them, and has them --

18 THE HEARING OFFICER: And 66 on it is not
19 objected?

20 MS. DASCHBACH: Well, we would put the
21 photos, which is 67, is not objected to, and
22 then we would reference for tomorrow morning
23 66 the drawing as admitted, overruling the
24 objection.

25 THE HEARING OFFICER: What I'm talking about

1 all the photographs that Mr. Lapeze said were
2 not listed as an exhibit that were attached
3 to the pre-trial brief.

4 MR. JONES: I think the only one he objected
5 to was the one with the red lines around it.

6 MR. LAPEZE: I think that was 66.

7 MR. JONES: 66. You didn't object to the
8 historical evidence. That's why I was
9 perplexed, unless I missed that.

10 THE HEARING OFFICER: Okay.

11 MR. LAPEZE: Well --

12 MR. CASH: I think we have a running --
13 here's the thing about the historical. I get
14 where you're going with this.

15 We, we did a blanket objection on
16 everything that has to do with the change in
17 the nature of the property.

18 THE HEARING OFFICER: Right.

19 MR. CASH: So that would cover the photos,
20 the testimony. I just don't want to jump up
21 and object every time somebody mentions it.

22 So you understand that we object to that --

23 THE HEARING OFFICER: No. I understand.

24 MR. CASH: -- continuing.

25 THE HEARING OFFICER: So my only question is

1 that was used today. Is it -- he never
2 offered it. So it will be offered at some
3 point later.

4 MR. HUDDALL: I'm sorry, what was used?

5 MR. CASH: Aerial photos. That's what you're
6 talking about?

7 THE HEARING OFFICER: Yeah, that's what I'm
8 talking about.

9 MR. HUDDALL: We don't -- we don't object to
10 those. Those are --

11 THE HEARING OFFICER: He did object to them.
12 He said you didn't list them as exhibits.

13 MR. CASH: No, I think we're talking about
14 two different things.

15 THE HEARING OFFICER: Didn't you object to
16 those?

17 MR. JONES: I don't think you did.

18 MR. LAPEZE: I think I did when -- when the
19 first slide for Mr. Edwards, I believe, was
20 the 1941 aerial photo showing the E&P area.

21 THE HEARING OFFICER: I thought you were
22 objecting to all of them.

23 MR. LAPEZE: Well, I am. To Mike's point,
24 instead of jumping up and down every time
25 they showed an aerial photo.

1 THE HEARING OFFICER: No, no. I understand
2 that. My only point is --

3 MR. CASH: Here's the rub. I know they're
4 going to tender them, and I understand you
5 are going to accept them. And we just aren't
6 waiving any objections, Judge, to the subject
7 matter.

8 MR. JONES: Right. I got it.

9 MS. WHEELER: For clarity, the list that
10 Raceland did of the un-objected to exhibits,
11 it says, "Without objection." We just want
12 it to reflect --

13 THE HEARING OFFICER: With objection.

14 MS. WHEELER: -- objection -- "with objection
15 overruled."

16 THE HEARING OFFICER: Sure.

17 MR. LAPEZE: That's fine.

18 MS. WHEELER: There's a couple like that.

19 MR. CASH: Perfect. All right.

20 THE HEARING OFFICER: Okay. So see everybody
21 at 8:30.

22 (Hearing recessed at 3:24 p.m.)
23
24
25

REPORTER'S CERTIFICATE

I, ESTELLA O. CHAMPION, Certified Court Reporter and Registered Professional Reporter in and for the State of Louisiana, and as the officer before whom this testimony was taken, do hereby certify that the foregoing proceedings before the Department of Natural Resources, Volume 1, reported on November 12, 2015, transpired as hereinabove set forth in the foregoing 273 pages.

I further certify that said proceeding was reported by me in the Stenotype reporting method, was prepared and transcribed by me or under my personal direction and supervision, and is a true and correct transcript to the best of my ability and understanding.

I further certify that the transcript has been prepared in compliance with transcript format guidelines required by statute or by rules of the board, that I have acted in compliance with the prohibition on contractual relationships as defined by Louisiana Code of Civil Procedure, Article 1434, and in rules and advisory opinions of the board.

I further certify that I am not an attorney or counsel for any of the parties, that I am neither related to nor employed by any attorney or counsel connected with this action and that I have no financial interest in the outcome of this matter.

This certificate is valid only for this transcript accompanied by my original signature and original required seal on this page.

Baton Rouge, Louisiana, this 3rd day of December, 2015.

ESTELLA O. CHAMPION, CCR, CRR
CCR No. 76003, NCRA NO. 36939

DONNA CHANDLER, CCR, CRR
CCR NO. 29002, NCRA NO. 009411